Australian Consumers' Association

November 1995

CHOICE

Overweight and overwhelmed?

Which weight loss programs work?

Keeping your home cool in summer

Tests

Air conditioners

Electric lawnmowers

About the Consumers' Association

The Australian Consumers' Association is a non-profit, non-party-political organisation established in 1959 to provide consumers with information and advice on goods, services, health and personal finances, and to help maintain and enhance the quality of life for consumers.

We are completely independent. We buy all the products we test on the open market. We are not beholden to any commercial, government or union interests, and we don't accept advertising, paid or unpaid. Our income is derived from the sale of CHOICE and our other publications and products.

We test and rate products and services. Our CHOICE ratings are usually based on quality without regard to price, and are derived from lab tests, expert judgments and reader surveys. If a product is high in quality and relatively low in price, we deem it a Best Buy. A rating applies only to the brand and model tested, not to other models sold under the same brand name, unless so noted. We can't conduct special tests or provide information about tested products beyond what appears in CHOICE.

No commercial use policy. Our ratings and reports may not be used in advertising or for any other commercial purpose. The Consumers' Association will take all steps open to it to prevent commercial use of its materials, its name, and the name of CHOICE or our other publications. Please report any apparent violation to the Consumers' Association, 57 Carrington Road, Marrickville 2204; fax (02) 558 9341.

We represent and act in consumers' interests. We lobby and campaign on behalf of consumers to promote consumers' rights, to influence government policy, and to ensure consumer issues have a high profile in the public arena.

Membership. Subscribers can become voting members of the Consumers' Association on application. Membership costs $75 per year, which covers your subscription to CHOICE plus a further subscription to our policy magazine, *Consuming Interest*.

About CHOICE

CHOICE is published monthly by the Australian Consumers' Association.

Subscription rates. $48 for one year, $89 for two years; institutions $66 per year.

Subscription problems or changes of address. Write to Subscriptions Department, CHOICE, 57 Carrington Road, Marrickville 2204, phone (02) 558 8088 or fax (02) 559 3260. Please include your subscriber number (found in the top corner of your CHOICE address label) or have it ready by you when you phone us.

Back issues. Subscribers can buy back issues at the following rates: $6 for one copy, $10 for two, $13 for three, and $4 each after that. Non-subscribers can purchase back issues that are less than 12 months old for $16 per copy; more than 12 months old, $10. Write to Consumer Information Service, CHOICE, 57 Carrington Road, Marrickville 2204, or phone (02) 559 9855.

Permissions. Reproduction of CHOICE and CHOICE Books in whole or in part is forbidden without prior written permission (and is never permitted for commercial purposes). Address requests to Consumer Information Service at the above address.

Mailing lists. We never sell the CHOICE mailing list to other organisations. We also don't purchase mailing lists for marketing purposes from other organisations.

Other Consumers' Association products

CHOICE Books publishes non-fiction titles on a wide range of topics, with a consumer perspective.

Consumer Bookshelf offers both CHOICE Books and material from other publishers for sale by mail order.

CHOICEFax supplies faxed copies of many CHOICE articles for $6 per article to subscribers, $16 to non-subscribers. Call 558 8088 to order an article, using your credit card details.

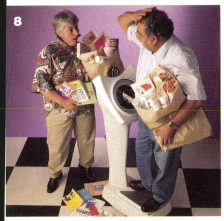
Test Research provides fee-for-service testing of consumer products for other consumer organisations, government and industry. Contact Jeanette Dwyer on (02) 559 9801.

Consuming Interest, our quarterly campaigning magazine, is published in February, May, August and November. It provides straight facts, probing analysis, in-depth reporting, informed opinion and stimulating debates. It also gives updates on the lobbying and campaign projects of the Consumers' Association.

CHOICE Travel. This magazine is produced by the UK Consumers' Association and reprinted by CHOICE four times a year. Its reports are independent in the same style as CHOICE and, while they're written from the perspective of a European base, most of the information in them is just as useful to travelling Australians.

VOLUME 38 NOVEMBER 1995 NUMBER 11

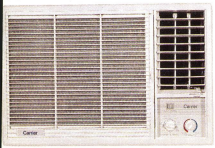
8



Cover photo: Kent Mears

16

35



Next month

Washing machines, 500 L fridges, scotch, termite inspections, blenders, smart cards, travellers' health, making a will, the CHOICE Annual Buying Guide.

January, February, March

Tests: Digital mobile phones, Windows 95, electric wall ovens, ice cream, cassette decks, microwave ovens, compact cameras, pre-wash stain removers, multi-disc CD players, answering machines, window locks.
Reports: Using the hospital system, buying a mobile phone, buying a new bathroom, choosing a lawyer, new surgical techniques, pay TV vs free-to-air, house and contents insurance, bottled water, home security, genetic engineering in food, car reliability survey results.

We try to bring you tests and reports in the planned month, but sometimes have to move an article because of problems that occur during testing and research, or for lack of space in a particular issue. We apologise if this causes any inconvenience.

Choice Regulars

4 Choice Cuts

Car insurance for young drivers; choosing a repairer; inkjet printer update; spa safety; the shrinking toilet roll.

21 Shopping around

The cost of travel: airfares, hire cars and hotel rooms.

22 Bodywise

Does hormone replacement therapy place you at greater risk of developing breast cancer? And protein supplements — a waste of money.

24 Computing Choice

Your kids probably know what multimedia is, but do you?

27 Consumer Bookshelf

34 Consuming Interest

Privacy and access to information technology: two of the Consumers' Association's high policy priorities for the future.

46 What do you know?

Our regular consumer quiz.

46 Recalls and bans

Choice Reports

6 Any old irons?

We've found the oldest CHOICE-recommended appliance that's still working — can you guess what it is?

16 The monarchy vs republic choice

The implications of the monarchy/republic debate are complex and not well explained by politicians or the media. We've clarified the issues to help you make an informed choice when the time comes.

30 Keeping cool

How to keep heat out of your home, and ways of cooling it down once it's too hot to handle.

Choice Tests

8 Weight loss programs: sex, thighs and measuring tape

Weight loss is big business. Before you spend your money — and get frustrated by a lack of success — check out which weight loss programs should work for you, and how much they'll cost.

35 Reverse-cycle air conditioners

An air conditioner is a very effective way of cooling a room in any climate, but there's a big difference in performance between our top and bottom models.

40 Electric lawnmowers

They're great for smaller lawns, and this test found one electric model that almost rivals a petrol mower for harder jobs like long grass.

CHOICE CUTS

Insurance

CAR INSURANCE FOR YOUNG DRIVERS — LOSING THE PLOT?

FOLLOWING A QUERY from a reader, we asked major car insurance companies:

■ Do you keep records of young drivers' insurance history while they're covered under their parents' policies?

■ Do you let young people count a claim-free driving record under their parents' policy towards a no-claim bonus when they take out their own insurance?

All the companies we spoke to said they retain their records for between one and seven years, after which they're archived. They can be retrieved if necessary.

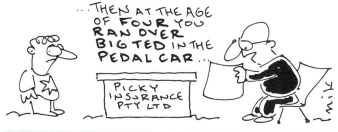
They also said they do count the time young people spend on their parents' policy towards their own no-claim bonus, but here's where the story gets more complicated.

The conditions for getting a no-claim bonus (NCB) vary between insurers. For example, some require young people to drive under their parents' policy for a specific period of time. Others don't, although the overall length of time spent driving will affect the amount of the NCB.

Some insurers give the maximum NCB only in certain situations, while others are more flexible. Still others say they have no hard and fast rule but treat each case on its merits.

If a young driver wants to take out insurance with an insurer that hasn't covered their parents, some won't recognise their earlier driving record. Others ask to see the policy document with the young driver's name on it, or a letter from the insurer confirming they were covered. In this situation, you'll need to shop around.

It would be more helpful if the insurance industry could come up with a standard way of dealing with young people taking out their own car insurance after being covered by their parents' policy. When competition becomes confusion it doesn't benefit anyone.



Can you help?

HOME SECURITY

We're planning to publish a report on home security early next year, and would like to hear about your experiences.

■ If you've had an alarm or other security system installed recently, were there any good or bad things about the installation?

■ Do you have security that's saved your house from being burgled, or alternatively that's failed you?

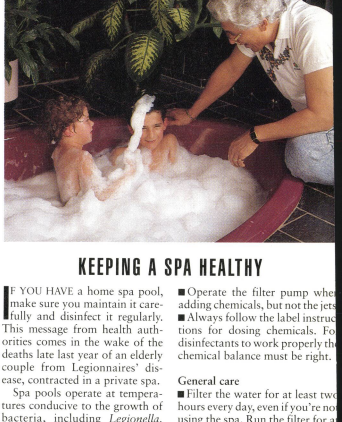
■ Do you have home security that you're happy with, or that you've had problems with?

We're interested in everything from complex home security systems to simple home safeguards. We'd appreciate it if you'd tell us the name of any products or companies you refer to.

Please send your letters to: **Home security**, CHOICE, 57 Carrington Road, Marrickville 2204, or fax them to us on (02) 558 9341. We need to receive them by the end of November.

Thank you for your help.

Spa safety


Kids may enjoy a spa pool, but try to stop them putting their heads under water, and follow the guidelines below for keeping the water free of bacteria.

KEEPING A SPA HEALTHY

IF YOU HAVE a home spa pool, make sure you maintain it carefully and disinfect it regularly. This message from health authorities comes in the wake of the deaths late last year of an elderly couple from Legionnaires' disease, contracted in a private spa.

Spa pools operate at temperatures conducive to the growth of bacteria, including *Legionella*, which causes Legionnaires' disease (a form of pneumonia).

Legionnaires' disease linked with spa pools is rare, but reports of people contracting skin, ear and eye infections from spas are common.

Bacteria can be controlled by thorough cleaning and disinfection and by following these guidelines from the National Health and Medical Research Council:

Disinfection

■ Use a test kit to check water conditions and disinfectant levels before each use. The amount of disinfectant required depends on how many people are using the spa, the water temperature, the amount of aeration and whether the spa is indoors or outdoors.

■ Add chemicals separately. Never premix them, as explosions or fires may result.

■ Operate the filter pump when adding chemicals, but not the jets.

■ Always follow the label instructions for dosing chemicals. For disinfectants to work properly the chemical balance must be right.

General care

■ Filter the water for at least two hours every day, even if you're not using the spa. Run the filter for at least an hour after use.

■ Check and clean the filter regularly.

■ Replace 10% of the water weekly.

■ Keep spa surfaces clean, including the surrounds, tiles and cover.

Safety tips

■ Don't allow children to use the spa unsupervised.

■ Don't stay in the spa for more than 20 minutes due to the possibility of heat stress and the increased risk of bacterial infection.

■ Don't put your head under the water (because of the risk of eye and ear infections) or swallow it.

■ Don't use the spa if you're injured, unwell or pregnant.

■ Don't run the spa above 40°C.

For more information contact your state branch of the Swimming Pool and Spa Association of Australia.

Appliance repairs

WATCH THIS LOGO

Question: Your fridge or washing machine has broken down and you need to call a repairer, but with so many listed in the phone book, who do you choose?

Answer: Go with the logo.

IF A REPAIRER features the Appliance Industry Association (AIA) logo in its advertisements, it indicates the company is a member of this national organisation. To become a member, repairers voluntarily agree to abide by the industry's code of practice on domestic whitegoods service.

While membership doesn't guarantee the repairer will abide by the code, if you have a complaint about an AIA member, you can ask the AIA to help. This could be a first step towards resolving your problem without having to lodge a complaint with your state consumer affairs department.

If an AIA member goes against membership rules and refuses to work with the AIA to resolve the dispute, the committee can dismiss the member from the association.

If this happens, it means your next step would be to take the issue to a consumer or small claims court or tribunal. However, the AIA says it's unusual for its members to end up in the tribunal, because they are keen to be seen as ethical — it's why they joined the association in the first place.

In NSW, the Department of Consumer Affairs worked with the industry to develop a state-endorsed advisory code of practice. The NSW code has existed for about two years now, but because most consumers don't know about it, the NSW Department of Consumer Affairs is relaunching it.

We'll be keeping an eye on its progress, so please write to us and let us know about your experiences using the service.

- For further information there are AIA offices in:
- NSW: (02) 899 7909.
- Queensland: (074) 93 6877.
- Victoria: (03) 9756 0166.

Invisible price rise

MYSTERY OF THE AMAZING SHRINKING TOILET ROLL

IF YOU'VE NOTICED your toilet paper is running out more quickly than it used to, you're not imagining things. Many rolls are actually shorter.

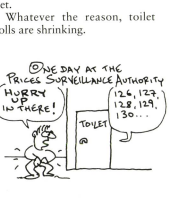
We're not sure who at the Prices Surveillance Authority actually sat down and counted the number of sheets in the average toilet roll, but according to the Authority's publication *Price Probe*, the average roll has shrunk from 500 sheets in 1988 to 280 sheets today.

The two main manufacturers told *Price Probe* the public was resistant to toilet paper price rises, which were on the cards both as a result of the recession and the preference for recycled, less environmentally damaging paper. So they reduced roll length instead, to recoup their extra costs.

Price Probe thinks new competition from cheaper brands has also lowered the average price the public is willing to spend on toilet paper. It says tax exemptions for 100% recycled paper encouraged new players to join the market, and while the exemptions no longer exist, they gave these companies the opportunity to compete aggressively in terms of price, especially for the economy and budget brand rolls.

As a result, prices stayed down and three new competitors grabbed 20% of the budget market.

Whatever the reason, toilet rolls are shrinking.



Update

NEW DRIVERS FOR OLIVETTI PRINTERS

Since our report on colour inkjet printers in the October issue of CHOICE, we've learnt that new colour printer drivers are available for the **OLIVETTI JP450** and **OLIVETTI JP360** printers.

Both printouts (pictured above) were printed on the **OLIVETTI JP450** — the one on the left with the original driver supplied to us, and the one on the right with the newer **OLICHROME** driver. As you can see, the graphics quality is greatly improved by using the **OLICHROME** driver.

Whenever you're buying a computer printer we suggest you check with the manufacturer that you have the best printer driver for the type of printing you want to do.

Corrections

ROAD-TESTING CAR INSURANCE

CHOICE, May 1995

In *The benefits*, on page 9, we reported that RACV keeps the registration refund on written-off vehicles. We have since been informed that RACV does pass the registration refund to policyholders.

CORDLESS DRILLS

CHOICE, August 1995

On page 43 the text and photos are transposed. The text for the **BOSCH GBM 9.6VES-2** is below the photograph of the **RYOBI 12 V Torque Force 220 (TFD-220R)**, and vice versa. The printed information in each case refers to the drill named.

LAUNDRY DETERGENTS

CHOICE, August 1995

On page 17, the statement "a 750 g pack of **OMO Micro** gives 21 [washes per pack]" should have read: "...a 1 L pack of **OMO Micro liquid concentrate** gives 21 washes per pack."

In the same article, in the table on page 19, the costs per wash for **HLD** and **HLD Phospate-free** were stated as 35 and 34 cents respectively. These costs should have been 32 and 31 cents respectively.

UNDERSTANDING SHARES

CHOICE, September 1995

The information in *Recent company floats — what are they worth now?*, on page 27, was supplied by the Australian Stock Exchange. The Finance Director for Morgan & Banks Ltd has since informed us that its price at listing should have been $1.50, not $1.90 as published.

Any old irons?

Earlier this year on our 35th birthday we started looking for the subscriber who owns the oldest Choice-recommended appliance that's still working. The competition was fierce and the entries far more numerous than we expected, but finally we have a winner.

WE RECOMMENDED THE **SUNBEAM ELECTRIC Automatic Frypan** in our second issue, in August 1960. Evelyn Yates of Mount Nelson, Tasmania (pictured right), is still using hers 35 years on, and says, "I still use it quite regularly ... as far as I can remember, only the cord has been serviced (and only once)."

It was a close thing: several other subscribers also still have this product, but none of them with the original glass lid that you can see in the photo. As Margaret Cowin of Boronia, Victoria, wrote, "We purchased the higher metal lid when it became available — I can only presume the original glass lid went to a white elephant stall somewhere."

Mrs Yates wins a CHOICE 'value pack', which includes a year's subscription to CHOICE, *Consuming Interest* and *CHOICE Travel* and three recent CHOICE books.

Honourable mention also goes to three other Sunbeam appliances — see photos, right — as well as to various models of Kelvinator fridges and Whirlpool and Simpson washing machines from the 1960s that are still going strong.

Thank you

Almost everyone who sent in an entry went to a lot of time and trouble to send us great photographs of themselves with their appliances. Many thanks for entering into the spirit of our 35th birthday competition so thoroughly. And thank you also for the many kind things you said about CHOICE and what it's meant to you over the years.

We're very proud to have such loyal subscribers, and pleased that you're still interested in buying appliances that provide quality, good performance and, of course, durability. We'll certainly keep testing them for you.

The winner of the draw for all entrants was David Denner of Mitcham, Victoria, who won a Mitsubishi HS-MX3 video recorder, recommended in the May 1994 issue of CHOICE. Congratulations and we hope you enjoy your prize.

The winner: Evelyn Yates and her Sunbeam Electric Automatic Frypan with its original glass lid.

Our winner Evelyn Yates also wrote: "Just for fun I am also enclosing a photo of tea-towels, which I am pegging using my remaining red Dura pegs. These were recommended by CHOICE in December 1961 ... I have always found them wonderfully easy to use (and find!) and under normal circumstances they have lasted very well. Unfortunately they couldn't withstand the crushing they received when I left their bucket in the path of a 4WD only two or three years ago. I wonder if those same Dura pegs are still available anywhere?"

We didn't expect our oldest appliance competition to come out looking like an ad for old Sunbeam appliances, but it certainly seems as if they were built to last. As well as the winning electric frypan, we received more entries about three other Sunbeam products than for any other single brand.

The famous 'silver Sunbeam' toaster that lowers the bread gently into the slot had the most entries overall. CHOICE first recommended the Toastermatic AT 35 in December 1960, and plenty of subscribers still have this toaster working away every day. Pictured here with her toaster is Val Schweinsberg of Jindalee, Queensland (with her husband Paul reflected in the side of the toaster!). We also recommended the Sunbeam AT 40 in February 1968, and plenty of those are still making toast daily too.

No surprise either is the simply named Sunbeam Steam Iron, which we recommended in October 1960, and the Spray, Steam and Dry Iron from August 1964. We received comments such as, "My marriage at that time did not survive ... but the iron did, and is still going strong." Shown with her 1964 iron is Margaret Jeffery of Moorabbin, Victoria.

And then there's the Sunbeam Mixmaster, recommended in October 1965 and still highly praised by its long-time owners. Shown here with hers is Mavis Hall of North Rocks, NSW, along with some of the 400+ copies of CHOICE she's collected during her 35 years of subscription. "It certainly has been one of the best investments we have made," she says.

Angela and Brian McBride of Greystanes, NSW, have had this Simpson A38 automatic washing machine since June 1963 and it's still a "sturdy workhorse", though Angela "gives it a few words of encouragement each time she switches it on" to keep it going. CHOICE recommended it in March 1964, after our first test of automatic washing machines. This test ran so long it was serialised in the magazine!

Brian Marchant of Waramanga, ACT, still warms himself in front of his Speedie R18 bar heater, recommended in CHOICE, June 1962, as the "Best value 2000 watt radiator". He also says, "I have kept every copy of CHOICE since it was first published (to my wife's consternation). I guess it is an indication of the value I see in your tests and reports."

Adam Carter from Old Reynella, SA, still has the January 1965 copy of CHOICE and the Westinghouse fan recommended in it — "It's served our family well for the last 30 summers ... I expect it to do quite a few more too!"

Sex, thighs and measuring tape

For most of us losing weight is simply a struggle, but for some it's a way to make big, big bucks. We weigh up the weight-loss programs.

The conditions: buyer beware

WE LAST TOOK A LOOK AT THE STATE OF THE WEIGHT loss industry in June 1993. The picture wasn't particularly good. At that time, a code of practice was being drawn up to try to improve the consumer's lot when dealing with these companies.

The code has been in place for about a year now, and although everything is not perfect, it seems to have encouraged the companies lift their game in some areas — others still leave something to be desired.

Cooling off

Most of the programs don't use contracts — so you generally won't find yourself signing on the dotted line. Two that do are **GLORIA MARSHALL** and **JENNY CRAIG**.

In the past we weren't happy with some parts of their contracts, but now at least they both include a five-day cooling-off period. That means you have five days after signing to change your mind and get your money back.

The unfair clauses we spotted last time are gone too — **GLORIA** no longer appears to try to avoid any liability for injury caused by using the company's facilities, and **JENNY** doesn't seem to try to dodge responsibility under the Trade Practices Act to give you a refund under some circumstances.

Can I have my money back, please?

There's no standard approach to refunds, though. Some of the companies, like **LITE 'N' EASY** and **THE DIET FACTORY**, are pay-as-you-go, so the issue of refunds doesn't often arise, although **LITE 'N' EASY** says it will give you a refund if you aren't happy after one week.

HERBALIFE, GUTBUSTERS, MEDITRIM and **WEIGHT WATCHERS** all say 'no-questions-asked' refunds are the way they do business (though **HERBALIFE** only gives you 30 days from the date of purchase to ask for one).

JENNY CRAIG will give you refunds only under some specified circumstances (such as if you move more than 20 km from the nearest centre, or if your doctor says you must stop doing the program), and **GLORIA MARSHALL** says it considers refund requests on an individual basis.

So it's still harder to get your money back from some companies than from others — but don't be afraid to ask for it, even if it's just because you decide the program doesn't suit you after a few weeks.

For today only...

Cooling-off periods have made things a lot less stressful for would-be dieters. When we sent volunteers along to the programs, both **GLORIA MARSHALL** and **JENNY CRAIG** used the old high-pressure sales technique of the 'today only' discount.

The savings they offered seem substantial: at **GLORIA MARSHALL** our client was offered a $1033 program for $940, and at **JENNY CRAIG**, a $448 lifetime membership for $297. Tempting offers indeed, and hard to work out on the spot whether they're genuinely good value or not. At least with the

benefit of a cooling-off period, if you're pressured into a program you decide you don't want, you can get your money back during the next five days.

But that's not all...

Our clients' experiences show you need to be careful that you know exactly what all the costs of a particular program might be, before you agree to them. This is especially important as, if you're serious about losing weight, you're going to be with the program for the long haul — you won't just be 'on a diet' for the next couple of months.

With the exception of **THE DIET FACTORY** and **LITE 'N' EASY**, where all you pay is a set fee for food each week, most of the other programs had add-ons, discounts, package offers or complicated payment options that needed careful sifting.

For example, despite the 'today only' offer, our **JENNY CRAIG** client elected to join for one month to start — $19.95 — but **JENNY** usually also offers you the option of paying weekly ($6 per week). When our volunteer asked about the costs after her one month was up, she was told they would talk about that then.

Then there was the cost of **JENNY's** food, which cost our client $75 for a week, plus $12 for vitamins. And then there's the optional videos ... You'd need a brain like a computer to make sure you were getting the flexibility you wanted, at a price you were happy with.

WEIGHT WATCHERS also has an elaborate charging system, including concessions, package deals, numbers of classes that can be missed and the penalties involved, cost of rejoining, etc.

We'd like to see all the programs giving each person a printed schedule of fees, charges and optional extras, so you can work out the best option for you, and the real long-term costs. It's hard to dispel the impression that the reason some of the programs don't do this is because they don't want you to be able to add up all the costs easily.

Our highly trained weight-loss consultants...

How you get to be a weight-loss consultant depends on who you work for. **WEIGHT WATCHERS'** group leaders are former successful Weight Watchers themselves. They get extra training but, as with some other programs, they aren't health professionals and may not be able to deal with particular problems like eating disorders. **GLORIA's** staff are also typically former clients who are given extra training.

JENNY CRAIG trains its own staff and also has a company dietitian on call to answer any particular problems.

MEDITRIM goes for tertiary-trained health educators (or people with "proven training and experience in the weight management industry").

HERBALIFE will take and train anyone who's interested in selling the product. On the other hand, **GUTBUSTERS** insists on appropriate graduates or people with a minimum qualification of fitness leader accreditation.

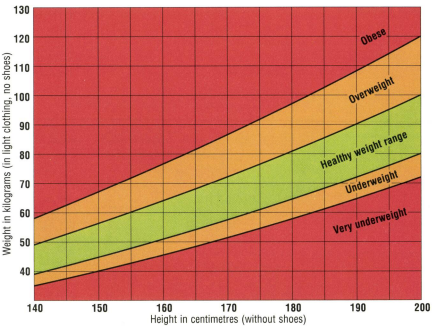
All the programs are claimed to be designed by medical or diet professionals, but many of the staff you actually deal with are only facilitators, trained just to deliver the program.

IS MY WEIGHT OK JUST AS IT IS?

No one particular weight is exactly right for your height. Instead there is a healthy weight range.

There are two ways to work out if your weight falls into the healthy range for you. The easy way is to check the chart and see if your weight and height fall into the green 'healthy' band.

Source: Australian Nutrition Foundation



If you don't have the chart handy when you need it, there's a formula to work out your body mass index (BMI): you divide your weight (in kilograms) by the square of your height in metres. To make it into the healthy weight range your BMI should be between 20 and 25. Higher than 25 and you're overweight, lower than 20 and you're underweight.

For example, if you weigh 75 kg and are 1.75 m tall (3.06 is the square of 1.75): BMI = 75 ÷ 3.06 = 24.5 — which is OK.

Body mass index was designed to apply to adults over 18, so you shouldn't use it for children or younger teens. It also doesn't apply to anyone who is particularly muscular — for example, someone who does muscle-building exercise.

The bottom line

Things are improving, but the industry has some way to go until all aspects of the code have been put into practice.

The industry was supposed to have set up a body by now, to oversee the code and ensure that it's being complied with. But so far only **JENNY CRAIG, GLORIA MARSHALL, HERBALIFE** and **MEDITRIM** have actually signed on, and things are moving slowly.

So while there are some areas where things have improved, it would be an unwise consumer who lost sight of the fact that they're dealing with competitive commercial enterprises (some of them worth many millions), not a cosy weight-loss group.

The programs: will you lose weight?

The weight-loss programs are nationally available (except for Meditrim, which is only available in Victoria). The profiles are based on information from each company, plus visits our volunteers made.

Our verdict

We rated each program based on its food, nutrition education and price. To be rated as '**good**' a program had to:

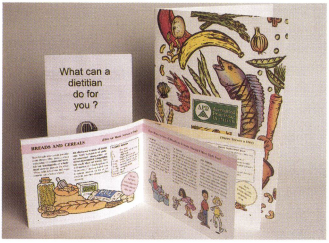
- Be nutritionally balanced.
- Be based on healthy eating principles.
- Teach you how to change your lifestyle in terms of diet and exercise.
- Be reasonably priced. We decided paying up to $500 in six months for a decent program was reasonable; our **'good'** programs prove they don't have to cost more to be effective.

A program is rated '**OK**' if it complies with the first two criteria, but you either wouldn't learn much about healthy eating, or the program is relatively expensive.

A program is **not recommended** if it isn't either nutritionally balanced or based on healthy eating principles.

DIETITIAN

What to expect: Dietitians vary in their approach, but generally they aim to give individual advice tailored to your current eating habits and lifestyle. Our volunteer who visited a dietitian in private practice was given personalised advice on problem areas in her diet (in particular how to cut down on fat). The dietitian also discussed her current lifestyle and gave advice on exercise.



Price: First visit $55, subsequent visits $30.
Approximate six-monthly cost (with two visits per month): $385
Good points

- Personalised advice on a nutritionally balanced diet and an exercise plan based on current eating habits and lifestyle.
- Your medical history or problems are taken into account.
- There are no contracts, and the cost is both reasonable and predictable.
- Long-term, slow weight loss is encouraged, which you're more likely to be able to maintain.

Bad points

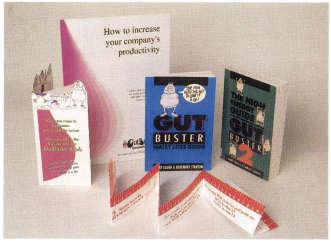
- There may be variation from dietitian to dietitian, but the one our client went to wanted her to return after a month — this probably wouldn't be sufficient support in the initial stages.

Our verdict: Good

If you follow a dietitian's advice and food plan, you should lose weight and learn how to keep it off. Enlisting the help of a qualified dietitian is a reasonably priced, personalised way to learn weight management, and one way to ensure you get professional guidance and treatment.

GUTBUSTERS

What to expect: A men-only program for "men with the gut to give it a go", which focuses on "waist loss", not "weight loss". The introductory program runs for six weekly group meetings, which aim to make waist-reducing lifestyle changes. Diet, exercise and other lifestyle issues are discussed. The GutBuster Club (a kind of weight maintenance program) follows, with regular meetings, special seminars, a newsletter and discounts on other GutBuster programs (for example cooking courses).



Price: The six-week program is $245, plus a maintenance kit consisting of eight audio tapes and notes for $50, payable up-front. If you don't lose 5% of your waist measurement you can do the introductory program again for free. The GutBuster Club has a yearly fee of $20; monthly club meetings are $10.
Approximate six-monthly cost (first six months): $365
Good points

- Sensible exercise and a healthy eating program are encouraged, without calorie counting.
- The program is designed by dietitians and exercise specialists.
- Instructors are professional, trained health leaders.
- No contracts, and a no-questions refund policy.

Bad points

- You must pay up-front for the whole six-week program, although refunds are given at the client's request.

Our verdict: Good

An all-round lifestyle program, based on sensible nutrition and health advice, and tailored for men. Although the up-front cost for six weeks is fairly high, continuing costs are minimal.

JENNY CRAIG

What to expect: The program includes a meal plan mainly based on packaged **JENNY CRAIG** foods (plus a multivitamin supplement). The meal plan tells you which fresh foods to add to the packaged food at each meal. Two visits a week to the centre include an individual consultation and a group 'lifestyle class'. The first visit is free.

Price: The basic weight loss program is $99 (for as much weight as you want to lose) plus Jenny's Cuisine food (around $55 to $75 per week). You can pay by instalments if you wish.
Approximate six-monthly cost (based on the difference between buying 'lifetime membership' and Jenny's Cuisine, and what it would cost to buy your own food): $440.
Optional extras: Walking and lifestyle counselling video tapes and maintenance program: if you buy them up-front as 'lifetime membership' with the basic program, the total cost is $297. If you don't lose the weight agreed on, you can continue the program free (although you still pay for the packaged foods).
Good points
- The diet plan is nutritionally balanced and shouldn't be boring — you can now choose your own Jenny's Cuisine meals.
- Gradual weight loss is advised, and exercise encouraged.
- In the short term (while very dependent on Jenny's Cuisine) you may not learn much about selecting and cooking foods. However, as the program progresses you are gradually weaned off the packaged foods and taught how to plan for yourself.
- A weight maintenance program is available.
- The program is designed by an advisory board of doctors and dietitians.
- There is a five-day cooling-off period.
- A dispute resolution scheme is in place.

Bad points
- The pricing can be a little opaque, and the 'today only' special (see page 8) might put you under pressure to sign up, although the cooling-off period still applies.

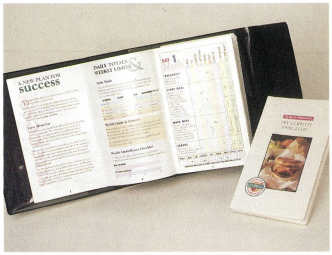
Our verdict: Good

A program based on sound principles and, in the long term, it provides a good combination of diet advice, information and exercise counselling.

WEIGHT WATCHERS

What to expect: Group meetings are held once a week in local areas. You are weighed each time, and then there is a group session that discusses some aspect of nutrition or weight loss. The program initially includes meal plans (two different types to choose from), and at each meeting more printed information (about different foods, eating out, etc) is provided, so you build up to planning your own daily meals from a wide range of foods.

At week six you have an option of swapping to the new 'fat and fibre' program, which focuses on selecting foods which add up to a particular number of grams of fat and fibre.



Price: A membership fee of $38.50 (including your first meeting) is charged; concessions are $19.50. Each meeting then costs $13.50 ($12.50 concession), although there are cheaper package deals. Other items such as scales, magazines, cookbooks and videos are also sold.
Approximate six-monthly cost: $375 (paying week by week).
Good points
- Nutritionally the program is recommended; it's well balanced and based on healthy eating guidelines.
- Gradual weight loss of around 1 kg per week is suggested. This is normally considered a healthy and maintainable amount.
- The program is designed by a dietitian and other medical experts.
- Only people who can afford to lose at least 5 kg can join.
- A six-week weight maintenance program is available, and if you're successful you become a life member.
- Exercise is encouraged, and information on making changes to your lifestyle is given.
- There are no contracts; the program is largely pay-as-you-go, although there are packages available. If you're paying week by week you normally have to pay one meeting's back fee when you miss one or more meetings.
- If you're dissatisfied after the first week, you can get a refund. Refunds on package deals are given on request.

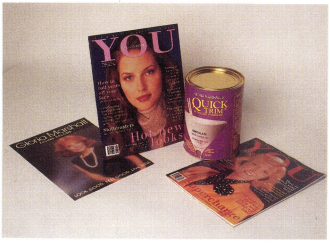
Bad points
- The new 'fat and fibre' program may be more difficult to follow, especially when eating out, but it is only optional.

Our verdict: Good

A well balanced, low-cost program with good support, meal plan and exercise components. Will suit those who prefer group support, rather than individual counselling.

GLORIA MARSHALL

What to expect: Your first visit is free. If you sign up you receive a meal plan (which initially includes an optional shake that largely replaces some meals), and you agree to attend the salon for a number of half-hour sessions each week. These sessions consist of a meeting with your counsellor and an exercise session on the salon's machines. You are weighed at every visit, and measured once every 10 hours' worth of visits. **GLORIA MARSHALL** is only for women.



Price: The price is based on the amount of weight you have to lose, and therefore the number of sessions you need to attend. Each half-hour session is nominally $6, although our volunteer was charged $1033 for 152 half-hour sessions over six months. This is around $6.80 per visit, but the price also included a month's supply of the shake, which, at two shakes a day, would normally have cost $49 per week.

Approximate six-monthly cost (at $6 per visit, based on our volunteer losing 9 kg): $900.

You can pay in instalments, but our client was told she could have a discount (of around 10%) if she paid in full straightaway. If you follow the program but don't lose the weight agreed, you can continue free until you do.

Good points

- The diet is designed by a consultant dietitian. When you get to the stage of planning your own menus (after four weeks), it's nutrionally balanced and based on healthy eating principles. It should also teach you how to plan your own meals.
- The aim is for gradual loss of weight and inches.
- There is a five-day 'cooling-off' period.

Bad points

- The pricing structure is complicated and it's hard to calculate what's a good deal and what you're really getting for your money.
- The shake is expensive, and although it's claimed to be optional, our volunteer wasn't told this. Generally speaking, drinks which replace, or largely replace, meals aren't recommended in a diet, but it's only an optional part of the program for the first four weeks.

Our verdict: OK

An expensive program, and to get the best deal you may be up for large up-front payments. However, apart from the optional shake, it's based on sound principles, although it's a bit low in carbohydrate, as it doesn't include enough breads and cereals. It should teach you long-term healthy eating skills.

MEDITRIM

What to expect: A personalised diet, exercise and lifestyle program where your personal consultant comes to your home once a week and advises on all aspects of weight loss — they may even go walking with you, or assist you with choices in the supermarket, or cooking skills. (Victoria only.)

Price: Life membership costs $189 (or $139 concession), and weekly visits cost $20 each. There are no restrictions on life membership — you can stop and start as you wish.

Approximate six-monthly cost: $700.

Good points

- The program is designed by a former nurse and health educator, in consultation with medical and diet experts, and is nutritionally balanced.
- Gradual weight loss is encouraged.
- Health screening is carried out and your doctor's advice sought throughout the program.
- A structured exercise program is included.
- A weight maintenance program is included.
- A flexi-plan payment system allows you to pay off the life membership charge in instalments, and if you stop the program you don't have to pay the remainder, but can start payments and the program again later if you wish.
- You can get a refund (less 10% after five days) if you return all program materials in good condition.
- Aside from the life membership fee, you pay as you go on a week-by-week basis.
- There is a five-day cooling-off period.
- A dispute resolution scheme is in place.

Bad points

- There is a somewhat elaborate system of different types of 'days' (ABC days, basic days and fruit and vegetable days), which could be confusing. The company says they increase interest and make the diet easier to stick to compared to calorie counting or exchange systems.

Our verdict: OK

A fairly expensive program (the $189 membership cost bumps up the price compared with Weight Watchers, GutBusters or a dietitian). However, it's nutritionally well balanced and includes exercise and lifestyle components. It's a very personal method of weight loss, which may be ideal for people who like lots of assistance and supervision.

THE DIET FACTORY

What to expect: You phone the company and order calorie-controlled meals and snacks to be delivered to your door each week. Breakfasts and lunches are stored in your cupboard or fridge, dinners are frozen.

Price per week: 1000 calories, $78; 1200 calories, $82; 1500 calories, $85.
Approximate six-monthly cost (compared with buying your own food): $310.
Good points
- The diet is nutritionally balanced and based on healthy eating guidelines. Special requests for your likes and dislikes can usually be catered for.
- No additional food is needed, and vitamin supplements are not required.
- Gradual weight loss of around 1 kg per week is suggested.
- The diet is designed by medical practitioners specialising in weight loss.
- You pay as you go, and can stop at any time — there are no contracts.
- Basic information leaflets on exercise and eating dilemmas are provided.
- The costs are clear and there are no contracts; you can cancel at any time.

Bad points
- There are no nutrition breakdowns or menu plans to teach you about selecting foods once you go off the program, so you may not learn how to keep the weight off. However, the amount and type of food might be educational.

Our verdict: OK

It's a nutritionally balanced and healthy meal plan which doesn't suffer from contracts or hard-sell tactics, but you won't learn much about selecting foods or preparing your own meals to keep the weight off. As you don't have to buy any other food, it's reasonably priced.

LITE 'N' EASY

What to expect: A home-delivered calorie-controlled meal service, which also provides information and support (via a 'personal phone consultant' and leaflets) on lifestyle and exercise.

Price: 1200 calories per day, $85; 1500 calories (or diabetic program), $88.
Approximate six-monthly cost (compared with buying your own food): $390.
Good points
- The meals are nutritionally balanced and consistent with healthy eating advice, and can usually be tailored to your likes and dislikes.
- Gradual weight loss is aimed for. They encourage measuring the loss in inches, rather than weight.
- Planned by a chef and a dietitian, who will answer any questions your personal consultant can't.
- Exercise is encouraged, in the form of a daily walk. They are in the process of developing an exercise program.
- No contracts, and the costs are clearly explained — you can cancel at any time. If you're unsatisfied after one week, you can get your money back.

Bad points
- There are no nutrition breakdowns or menu plans to teach you about selecting foods once you go off the program, so you may not learn how to keep the weight off. However, the amount and type of food might be educational. The personal consultant should also help.

Our verdict: OK

A nutritionally balanced and sensible way to lose weight, although it's unlikely to provide education in healthy eating. No contracts or high-pressure sales techniques. As you don't have to buy any other food, it's reasonably priced.

HERBALIFE

What to expect: You contact a distributor by phone and they will generally visit you to explain the program. It consists of a powdered shake which, along with various vitamin, mineral and herbal supplements, is used to replace two meals a day. You eat one normal meal for dinner or lunch.

Price: The basic program costs between $150 and $200 per month, depending on which supplements you want.
Approximate six-monthly cost (compared with buying your normal food): $290.
Good points:
- There are no contracts or joining fees; you usually just buy one month's supply at a time.
- The product (or unused portion) can be returned for a full refund within 30 days.

Bad points
- The program doesn't teach you how to cook, eat or shop, so you'll probably regain lost weight when you stop following it.
- Replacing two meals a day with a shake drink is likely to become boring very quickly, and leave you hungry.
- Swallowing around 20 pills per day might be a problem for some people.
- The maintenance program involves replacing one meal per day indefinitely, as well as continuing with the supplements.
- Health screening is not carried out.

Our verdict: Not recommended

The program isn't recommended because, despite providing a reasonable nutritional balance, it's based on a meal replacement program and is not consistent with dietary guidelines. It certainly won't teach you healthy eating habits.

WATCHING HER WEIGHT

Felicity has been going to Weight Watchers on and off for years. "I lose weight," she says," but then I go off the program and gain it again — I guess I'm just one of those people who will always have to watch what they eat."

She says she feels comfortable at the meetings. "They always weigh you, but they're very discreet and never say your weight aloud — it's all kept confidential."

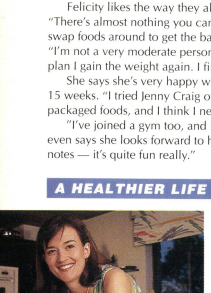
Although she has had both good and bad leaders over the years, she's really happy with the one at the centre she goes to now. "Our leader's lost lots of weight on the program, about 58 kg, so she knows what it's all about. I think, if she can do it, so can I — she's a real inspiration."

Felicity likes the way they always emphasise that it's not a diet but a food plan. "There's almost nothing you can't eat at all — you have whatever you like and just swap foods around to get the balance, but in moderation." Unfortunately, she says, "I'm not a very moderate person — it's all or nothing with me, so when I go off the plan I gain the weight again. I find it hard to stick to it if I'm not going to the meetings."

She says she's very happy with her progress this time, and has lost almost 15 kg in 15 weeks. "I tried Jenny Craig once, but that just didn't work for me — I don't like the packaged foods, and I think I need the group motivation.

"I've joined a gym too, and I go twice a week. I think that really helps." Felicity even says she looks forward to her weekly meetings. "We have a natter and compare notes — it's quite fun really."

A HEALTHIER LIFE



When Nikki's second child was six months old she decided that being "almost 30 with two children was no excuse for being fat". Her sister Lisa was also keen to lose some weight and had friends who'd been to Jenny Craig, so Nikki and her sister decided to try Jenny Craig together.

"At first my best motivation came from Lisa — she was really keen and that made a difference to *my* motivation," says Nikki. "Further down the track, as I started to lose weight, it was my motivation that kept Lisa going.

"The Jenny Craig plan really suited my lifestyle then. I had my small children at home, who were always eating through the day — when they stopped for a snack, I could have a coffee and a piece of fruit, or one of the Jenny Craig muesli bars. They also encouraged me to do exercise that fitted in with what I needed."

Nikki found the 'exchange' system suited her too. "If potato was on the menu, I could just swap it for rice, which I prefer," she says.

Nikki lost 26 kilos over six months (1 kg a week), but she originally found her new weight difficult to maintain: "I think I was just too thin." She gained some weight over the next three years and last year went back to Jenny Craig "for a few weeks, just to get back my motivation. Now I'm the same weight as when I got married — I'm happier and healthier at this weight," she says.

She thinks the Jenny Craig program has changed over the years. "The food itself has improved, and the instructors seem to be much less into 'hype-ing' you up to lose, lose, lose. Instead they encouraged me to achieve a weight I'm comfortable with."

Nikki has kept to her new weight for nearly a year now and thinks her success is due to eating a better diet with more fruit and vegetables, keeping active and going to the gym twice a week. "I'm just more active, healthier and happier."

Measuring up a diet

Most dieters' holy grail is the quick-fix solution — the magic pill or potion — which will make us instantly lose weight forever. Newspaper stories about such things as fat mice made effortlessly thin by researchers in the US, without so much as putting paw to treadmill, fuel our hope. But for now at least, the fastest weight we are likely to lose from any 'miracle' solution is from around the hip pocket.

The only way to lose weight permanently is to make changes to our lifestyle which mean we use more energy than we eat — and that takes time and commitment. At the same time we have to learn about food to make sure we still eat a nutritionally adequate and balanced diet.

Be wary of programs that want to tie you down to paying large (non-refundable) amounts of money up-front. Before you pay out your hard-earned cash, run the program through this quiz, taken from Rosemary Stanton's book *The Diet Dilemma*. If it doesn't stand up to the test, don't waste your time or money. If you find even one 'yes' answer to the following questions ... reject it.

- Does it promise fast weight loss?
- Does it claim to be effortless?
- Does it claim to be new or revolutionary?
- Does it claim you don't need to exercise?
- Does it claim to have a magic ingredient of any sort?
- Does it involve buying special powders, pills or meal replacements?
- Does it claim you can eat anything you want as long as you take a particular product?
- Does it cut out carbohydrates found in bread, cereals, grains or vegetables?
- Does it claim you can eat unlimited quantities of meat, cheese or eggs?
- Does it promise special garments, passive exercise machines, injections or vitamins will help weight loss?
- Does it tell you that you must eat an exact range of foods with no substitutions allowed?

10 top diet tips

1 Fast weight loss isn't fat loss. We put on weight gradually, but we want it off *fast*. Unfortunately it just doesn't work that way. Aim for no more than 1 kg a week — any more and you're just losing fluids and burning precious muscle — and you'll gain it again when you stop.

2 Set yourself a reasonable goal — supermodels are about as common as Superman. Start by trying to lose a few kilos, and once you get there, think about how you feel and whether you want to lose more. Don't be unrealistic.

3 Make a promise to yourself to live a healthier lifestyle. Don't 'go on a diet' or punish yourself with a crash diet; think about small long-term changes that will gradually reduce your weight, the same gradual way you put the weight on.

4 All calories aren't created equal. A calorie from fat can find its way to your stomach or thighs much more easily than a calorie from cereals and vegies.

5 Look at the places in your diet where you could cut down on fat — do you spread too much butter or margarine; eat too many fried snacks; nibble on biscuits; not cut the fat off your meat? These small changes are the easiest to keep going over the long haul, and that means keeping weight off.

6 Fill up on foods such as vegetables, fruit, bread (without the toppings!), rice, pasta — you don't have to go hungry to lose weight. The fibre content of these foods will fill you up before you can overeat.

7 Try to listen to your body — are you really hungry, or are you bored or sad? Is eating just a distraction?

8 Don't talk yourself into thinking that healthy food always tastes boring and the only nice stuff is full of fat and calories. There are both healthy and unhealthy choices which taste great — find out which of the healthier choices you like.

9 Exercise is the most important fat-burning thing you can do. Even gentle movement done regularly increases your metabolic rate, which means you burn more calories even when you're sitting around doing nothing. It will also help you get over plateau stages when weight loss slows down and depression sets in.

10 Don't be taken in by fast-talking sales pitches, secret ingredients or new wonder foods. Reputable scientists share their findings, so other scientists can check them and find out more — if it's a secret, then it's probably a scam.

DIETING MAKES YOU FAT

It sounds crazy — you go 'on' a diet, you sweat and suffer to lose a few kilos. Then, when you go 'off' the diet, you put the weight back on, and even if you weigh the same as your original weight, you look fatter and are more likely to put on even more weight!

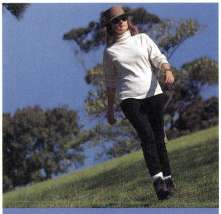
Crash diets promise fast loss, but they can't deliver fat loss. Instead, those impressive readings on the bathroom scales translate to a loss of water and, more importantly, muscle protein.

Unfortunately less muscle not only means more flab, it also means your metabolic rate is lower. So you burn fewer calories just being alive. Your metabolic rate depends on a number of factors, but the amount of muscle you have is an important one. If you lose muscle and therefore lower your metabolic rate, you may gain weight even if you eat your usual foods.

It's a vicious circle — lose muscle, decrease your metabolic rate, which makes it more difficult to lose more weight, or even easier to gain it.

The only real solution is to lose fat, not muscle, and that means slow weight loss, coupled with exercise. Exercise is doubly important because it actually speeds up your metabolic rate, and helps to build muscle as well.

Exercise may be the key not only to losing weight, but also to the hardest part — keeping it off. For most people, exercise alone is enough to stop you gaining weight in the future.



Exercise doesn't mean having to join a gym — regular walking is enough.

Exercise tips

■ Checking with your doctor is always a good idea before starting a new exercise lifestyle — chances are they'll enthusiastically give you the go-ahead.

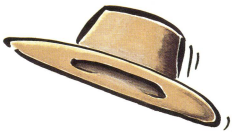
■ Finding time for exercise may be hard at first — it probably involves changing your lifestyle. Try to approach it positively, as time for yourself, not as a chore.

■ Start gently and always stop if you're in pain — exercise doesn't need to hurt to do you good.

■ Whatever exercise you take up, stick to it for a minimum of three weeks — it will probably take that long before you really start to enjoy it. If you know that, it will help you persevere.

■ Set yourself small and achievable goals — don't try to be a marathon runner or aerobics champ by next month.

■ Regular exercise helps burn fat, but don't underestimate the power of simply moving around more. Find every way you can to get moving — throw the remote control behind the couch; walk to your colleague's desk, don't phone; take the stairs — it all adds up to a more active lifestyle.



The monarchy vs republic choice

The implications of the monarchy/republic debate are complex and not well explained by politicians or the media. We've clarified the issues to help you make an informed choice when the time comes.

TO BE OR NOT TO BE? WILL Australia be a republic by the turn of the century? The pressure is on, but for many people the issues and alternatives are unclear. And though it may appear from many reports that a republic is both imminent and inevitable, there is no such certainty.

Those calling for change believe that becoming a republic will foster national unity and make clear the break from the UK and its royal family. It will be a symbol that Australia has grown up and become fully independent.

Opinion polls show that around half of all Australians support a move to a republic — but there is dispute over which version of a republic is the right choice.

The PM's model

On June 7, 1995, the Prime Minister outlined his government's model for a republic — which, it should be noted, is not identical with the version preferred by the Australian Republican Movement. The Prime Minister has opted for what he calls "minimal" change, replacing the Governor-General with a President who will take over identical powers and duties. Yet to brand the change as minimal doesn't do justice to the raft of questions and uncertainties that arise.

The Prime Minister has also been accused by some of giving up a significant opportunity for more far-reaching and radical constitutional reform, by attempting to win support with a simple republic model.

While the 'minimal' model might not be the most imaginative or inspiring blueprint for a republic in the history of politics, it might well spare us the revolution and guillotine too. See *What isn't the Keating government's model?*, below.

Staying the same

"Why change a system that has served Australia well?" ask the anti-republicans. On this side of the debate there appears more unity of purpose, but the motivations vary. While many are supporters of the Queen and the monarchy, others couldn't care less; they simply don't like the idea of politicians tampering with our generally stable system of government. They argue two things:

WHAT ISN'T IN THE KEATING GOVERNMENT'S MODEL?

The minimalist approach may seem the easiest way to a republic, but many believe an important opportunity for real, positive change will be lost. While we *can* become a republic with only minor changes to the Constitution, they think we also have an opportunity to change a Constitution which is difficult to understand and which gives a misleading picture of the way government works. See *The Constitution on some current issues* on page 19 for examples of what it leaves unsaid.

Other issues put to one side in Keating's model include:

- A Bill of Rights — to entrench the right of free speech and a free press, etc.
- Reconciliation with Aboriginal people and Torres Strait Islanders.

A constitutional revamp could aid this process and deal with issues such as native title, land rights, recognition of customary law, etc.

- Abolition of the states — or, alternatively, the paring down of central government.
- Environmental concerns and protections could be entrenched in the Constitution.
- The flag.

Your action

It would be useful to write to your federal member of Parliament if you believe such issues (or others) should (or shouldn't) form part of the republic debate.

■A change to a republic will bring no practical or material benefits. It will not help with any of Australia's real problems, such as unemployment, the national deficit, reconciliation between Aboriginal and non-Aboriginal Australians, and so on.

■Under the present system, Australia has had nearly 100 years of government free of political coups and revolution — a very stable record. We would be giving up a tried and tested system of government for one that is untried and whose details are subject to controversy.

As John Howard put it, speaking on behalf of the federal coalition: "Australia has been one of fewer than 10 countries that has been continuously democratic for the whole of the 20th century ... This debate is not about who is the better Australian. There are decent, passionate, loyal Australians on both sides of this argument."

The issues

In the pages that follow we'll take you through the big issues of the debate.

■Who should be Head of State: the Queen or a President?

If Australia becomes a republic:

■How should the President be chosen?

■What powers should the President have?

■What is the role of the people?

In dealing with the issues we would like to make it clear that neither CHOICE nor the Consumers' Association holds a preference or even a position. Our role is to foster a level of understanding that will facilitate informed choice.

The views expressed derive from the players involved, including Australians for Constitutional Monarchy, the Australian Republican Movement, the Prime Minister and the Leader of the Opposition.

Who should be Head of State?

Arguing for a republic

■Australia needs its own Head of State, not the Queen of England. "Our Head of State should be one of us." *Paul Keating.*

■At international functions, the Queen is seen by others as representing the UK, not Australia, and this creates confusion. Australia must be seen to be independent.

■Australia should be more in tune with its non-British migrants and Aboriginal people, and with its location as part of Asia rather than Europe.

Arguing against a change

■The Queen has the official title 'Queen of Australia' — she is 'ours' too. The Governor-General is Australia's constitutional Head of State — and he or she is an Australian.

■Australia is an independent nation:
— Neither the Queen nor the UK government has legal authority to force their will on the Australian government.
— Only Australians can change the Constitution.
— The Governor-General does not seek the approval of the Queen before taking action.

■The Queen never represents Australia abroad — our Governor-General is accorded full recognition as Head of State when overseas.

■Many non-British migrants to Australia come from monarchies, and some have fled republics. Thailand, Japan and Malaysia are local monarchies (as are Papua New Guinea and New Zealand).

Who would choose the President?

The Prime Minister

At present the PM chooses the Governor-General; in a republic the PM could similarly choose and appoint the President.

The Parliament

If Parliament is to elect the President, the candidate will need the support of the major parties. This could keep the President 'politically neutral', or something close to it. This is the Keating government's chosen method. In brief, the President would be:

■Known as 'President of the Commonwealth of Australia'.

■Nominated by the PM.

■Elected by two-thirds majority of a combined sitting of both Houses of Commonwealth Parliament. (This is also the preferred option of the Australian Republican Movement.) So large a majority makes it unlikely — though not impossible — for a single party to determine the vote.

" [Our] central objective is that Australia should have an Australian as Head of State; a person appointed by Australians who will be responsible to the people of Australia, and who represents Australian values ... A move to a republic would confirm the sovereignty of the Australian people."

Australian Republican Movement

"We believe that as a system of government ours works well and should not be tinkered with in the name of theory or to satisfy the envy or ambition of a select few ... The Australian Constitutional Monarchy provides an excellent balance between politicians representing the wishes of the majority and the Monarch protecting the interests of all Australians."

Australians for Constitutional Monarchy

■ Appointed to serve for a non-renewable fixed term of five years.
■ A politician will not be eligible to stand for presidency until five years after quitting Parliament.

The people

The people elect the President.

Advantages

■ Opinion polls suggest this is currently the preferred option of around 70% of Australians. It is the current will of the people. Some suggest this is due to a lack of trust in politicians to make the right choice.

Disadvantages

■ The president will have political power to rival the Prime Minister — indeed, he or she may be more popular than the Prime Minister. (The Prime Minister, it should be remembered, is not elected by the people but by his or her Parliamentary party.) This delivers a public mandate of considerable force, which it's feared could lead to power showdowns.
■ In reality the only person likely to succeed on a public popular vote would be well-known and with wealthy backers: politicians, ex-politicians, sports stars and other celebrities. As happens now, with the selection of a Governor-General, many good candidates are relatively unknown to the population at large. This is the trade-off should we move from a system of appointment to one of public election.

"We support a Head of State who can act without fear of intimidation and without having to win the transient favour of voters or politicians." *Australians for Constitutional Monarchy.*

YOUR ACTION

You need to decide whether to:
A. Retain the monarchy.
B. Become a republic. And, if so, whether the President is to be chosen and appointed by the Prime Minister, elected by Parliament or elected by the people.

The cult of personality: no one wants choosing a President for Australia to mimic the hype and frenzy of a US presidential election.

The Head of State's powers

IF THERE IS TO BE A CHANGE, IT'S appropriate to ask: Why have a Head of State at all? Why do we need a second, symbolic head, if all the important decisions are made by the Prime Minister and government? The idea is to have a balance to the PM's power.

This brings us to the core of opposition to the republic. Our present system of government (inherited from the UK) relies on inbuilt 'checks and balances' for its stability. The power of the Governor-General is one of these 'checks and balances' and is not illusory or merely symbolic — it's real, and has been used to topple a government. What are these powers?

Current powers of the Governor-general

The Governor-General has three types of functions and powers:
■ To perform ceremonial and representational functions.
■ Upon the advice of the Federal Executive Council or on ministerial advice, to:
— Issue writs (that is, formally commence the process) for House of Representatives elections.
— Approve Commonwealth laws and regulations (a necessary precondition to the laws coming into force).
— Appoint and remove High Court and other federal judges and commissioners.
— Appoint and dismiss ministers.
— Be nominal Commander-in-Chief of the defence forces.

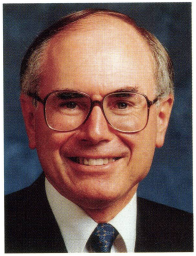
He or she also fulfils other roles and has powers that don't really fit into this debate.

■ **Reserve powers**

The powers mentioned above can only be exercised by the Governor-General on the authority and at the direction of the Prime Minister or other relevant ministers. However, there are three further powers which the Governor-General can use without the government's approval. Indeed, they were used to dismiss the Whitlam Labor government in 1975. They are called the reserve powers:

"A republic is the final step to becoming a fully independent nation. It will permit the full and unambiguous expression of Australia's national identity."

Paul Keating



"[A] great virtue of the present system is that we do have a politically neutral Head of State, and one of the questions that has to be addressed in this whole debate is whether we could possibly devise a system of government in this country which could deliver a more neutral Head of State ..."

John Howard

— To appoint the Prime Minster and the government.
— To dismiss the Prime Minister and the government.
— To refuse a Prime Minister's request for a dissolution of the House of Representatives or both Houses of Parliament.

In 1975 there was a Constitutional impasse when the Opposition in the Senate would not approve the federal budget and blocked supply of money to the government. The Governor-General dismissed the government and an election was held. In similar vein, in 1932 the Governor of NSW dismissed Premier Jack Lang for illegal conduct.

Our Constitution does not set out these reserve powers — they are traditional and derive from the monarchy. Their interpretation is also guided by tradition and convention. Just as the Senate acts as a 'check and balance' on the House of Representatives, so the Governor-General is an independent check and balance on the government, acting on behalf of 'all Australians'.

The strength and independence of the Governor-General arises in significant part from the community's support and respect for the monarchy (or at least for what it represents): impartial, unchanging and above politics — as, for example, we have seen in Thailand, where the royal family has, on occasion, stood up to the military government.

The Govenor-General doesn't make up the rules — he or she is bound by hundreds of years of precedent. The anti-republicans argue that appointment brings with it a sense of duty and obligation to follow these conventions, and so the Governor-General will not act arbitrarily or out of self-interest. They ask: Will a President feel the same compulsion?

Write them down?

Keating's model would leave the reserve powers as they are — unwritten. "The government does not believe this is the time to re-open a divisive debate about the Senate's power to block supply." *An Australian republic: the way forward* (from the Office of the Prime Minister).

The Australian Republican Movement, however, would prefer that the conventions and reserve powers of the Head of State were written down in full. It argues this would bring clarity and certainty to the options open to a Head of State in different situations, and perhaps avoid the anger and confusion that arose in 1975.

Why not write them down? One reason given is that we can't anticipate the future. If the President is to be a truly independent 'check and balance' on the acts and omissions of government, this view thinks it's best to have the flexibility to interpret the conventions in the light of changing circumstances.

YOUR ACTION

This is an issue critical to understanding the debate. If there is to be a republic you need to decide for yourself whether you support:
A. Keeping the reserve powers in full, or modifying them so there can never be a repeat of the 1975 sacking of an elected government should a hostile Senate deny supply.
B. Writing them — and their conventions for interpretation — into the Constitution. (This is called 'codification'.)

THE CONSTITUTION ON SOME CURRENT ISSUES

How we're governed

The Constitution doesn't talk about our system of government in any recognisable way. For example, there's no mention of a Prime Minister or Cabinet, or of the reserve powers of the Governor-General.

Aboriginal people and Torres Strait Islanders

There's no mention of indigenous land rights or occupation of Australia prior to white settlement. A referendum passed in 1967 (with 90% approval) led to the deletion of a clause which said that "Aboriginal natives" were not to be included in any calculation of Australian population.

Multicultural principles

There's no recognition of the principles of our multicultural society — for example, principles of racial equality and tolerance.

A Bill of Rights

Few rights get constitutional protection. One right guaranteed (though only in part) is freedom of religion; other rights not guaranteed include freedom of association and the right to vote.

What is the role of the people?

THE GOVERNMENT SAYS IT WILL put its model to the people in a referendum where you can vote yes or no. However, some argue it should be up to Australians to decide not just whether they want to move to a republic, but what that republic will be like. The coalition says there should be a People's Convention to work out a model for government. The present Commonwealth Government says "no".

People's convention

Advantages

■ To establish the will of the people as opposed to the wants of politicians.

■ There is room for interest groups to be involved and to feel a degree of ownership of the process and thereby of the resulting Constitution.

Disadvantages

■ Only a small number of people will be involved anyway.

■ It is an unnecessary cost. (The government's estimate is $40 million.)

In the 1890s, when constitutional conventions were held prior to federation, there was no Commonwealth Parliament or like body to represent all Australians — so people's conventions fulfilled this role. Now, it's argued, we have the Commonwealth Parliament, which is democratically elected by all Australians; we don't need a convention as well.

The coalition says that if a people's convention reached a consensus on the new Constitution, this model would go to a referendum and the government of the day would promote it. If there were no consensus, the coalition would "go to the people" and seek their views on a range of options, including the status quo. A referendum would follow. It could be a drawn-out process.

"We believe very strongly that the best way to tap into the mood for change in the Australian community at the present time is not to go down the take-it-or-leave-it path outlined by the Prime Minister. It is rather to establish a People's Convention." *John Howard, speaking on behalf of the coalition.*

"There were six Australian Constitutional Conventions between 1973 and 1985, and the Constitutional Commission met from 1985 to 1988. None of them led to changes of any significance to the Australian Constitution." *An Australian republic: the way forward* (from the Office of the Prime Minister).

YOUR ACTION

You need to decide whether you want:

A. The Keating government's model for a republic; or

B. A people's convention to frame the referendum about the republic; or

C. Our system of government to stay the way it is.

Where to now?

WHERE TO NOW DEPENDS ON THE next federal election. If Paul Keating's Labor Party is returned we can expect a referendum to change the Constitution in 1998 or 1999. To succeed, a referendum requires the support of a majority of Australian voters and a majority of voters in a majority of states.

In the event the referendum succeeds, Keating has said the nation will still be called the Commonwealth of Australia and Australia would remain in the Commonwealth of Nations.

If the coalition is elected beforehand, expect a people's convention in 1997 and one or more referenda to follow.

States' rights

One final, confusing issue: due to the nature of Australia's constitutional framework it's possible for one or more states to remain monarchies even though a national referendum to create an Australian republic is passed. The Commonwealth Government can't compel the states to give up the Crown. Each state will have to make up its own mind whether to become a republic or not.

This is the sort of problem that could end up in the courts. It's a matter that deserves to be sorted out before any national referendum.

And the cost?

The government's Republic Advisory Committee estimated the cost of the referendum as $3 million if it was attached to a general election, and $50 million if held separately. Of course, this could just be the start: if we become a republic there will be changes to currency, crests, uniforms, titles of defence forces and organisations, oaths of office, etc, etc...

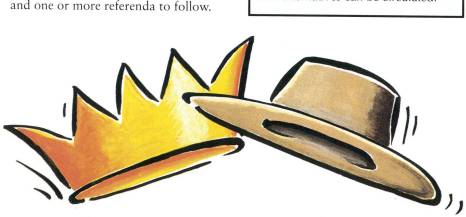
YOUR ACTION

Already the main organisations are gearing up. You may wish to contact one for its material, or even join up (enquire about a local branch):

■ **Australian Republican Movement:** National office, GPO Box 5150, Sydney 2001; phone 1800 802 000.

■ **Australians for Constitutional Monarchy:** GPO Box 9841 in your state/territory capital city; phone 1800 622 229.

Aside from these sources of information, there needs to be more public education on the choices and their meaning. A degree of Commonwealth Government funding will be necessary so that a fair range of views and alternatives can be circulated.

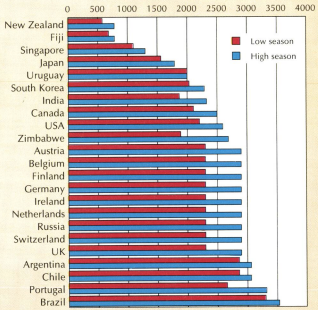


SHOPPING AROUND

OVERSEAS TRAVEL

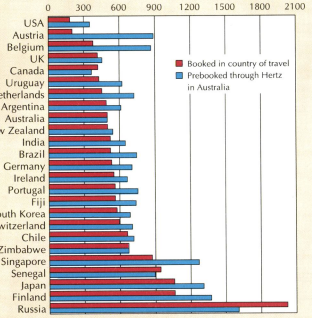
29
Passenger Trains and Baggage Checks
IMPORTANT – SECURITY NOTICE
Passengers are requested to keep all baggage in their personal custody at all times.
Do not leave it unattended, even for a moment.
Do not accept parcels from, or carry parcels for, any person.

Airfare (return, from Sydney)*



*These are published economy fares with Qantas. Discounts are widely available, so shop around.

Hire car (one week, small family car)**



** With unlimited kilometres. Some prices include insurance.

Hotel room (per night, twin share)

All prices in Australian dollars, based on exchange rates quoted in the *Australian Financial Review*, August 22, 1995.
Note that the prices are not corrected for or modified by local income levels and are therefore most useful as a gauge of what the Australian dollar will buy in the countries named.

HRT: breast cancer risk?

Recent research suggests women taking long-term hormone replacement therapy (HRT) may be at increased risk of breast cancer. How do you decide whether HRT is OK for you?

YOU MAY HAVE BEEN WORRIED by news of a recent study from Harvard Medical School which found that women who had taken hormone replacement therapy for five or more years had a significantly increased risk of developing breast cancer.

The report, published in *The New England Journal of Medicine*, found that women over 55 years of age had a greater risk than younger post-menopausal women, while the oldest women in the study (aged 65 to 69) were at highest risk.

Some menopause specialists, like Dr John Eden of Sydney's Royal Hospital for Women, dispute the Boston team's findings. "Even if the Harvard researchers are correct," says Dr Eden, "it's important to remember that in Australia today cardiovascular disease (heart disease and stroke) will kill nearly 50% of women. Breast cancer kills just over 4%."

Until menopause, women have less heart disease than men because they're protected to some extent by their reproductive hormones. But once they stop producing these hormones, they're as much at risk of having a heart attack as men — unless they take hormone replacement therapy.

According to Dr Eden, "HRT is likely to extend your life because you're less likely to die of heart disease, and it can also improve your quality of life by helping prevent osteoporosis and eliminating menopausal symptons."

However, Sydney cancer specialist Professor Martin Tattersall says the Harvard findings are certainly "of concern" and underline the need for every woman considering going on hormone replacement therapy to discuss it with her doctor and to weigh up the specific risks and benefits of HRT for her, before deciding on treatment.

Pros and cons

HRT consists of either oestrogen alone or oestrogen combined with progestogen (the synthetic form of another hormone called progesterone).

Most women choose to go through menopause without taking hormones. Of the 20% of menopausal women in Australia who do use HRT, most do so to relieve severe menopausal symptoms, such as hot flushes, night sweats and the resulting insomnia, 'creepy' skin and vaginal dryness. And most women use hormones for less than two years — distressing symptoms like hot flushes often subside in that time.

So if you're taking HRT to help you through a troubling phase, you can be reassured that there doesn't appear to be an increased risk of breast cancer if you're on hormones for less than five years.

In the long term, HRT may halve your risk of getting heart disease and reduce your risk of having a stroke or developing osteoporosis (thinning and weakening of the bones, which makes them prone to fracturing). However, to gain the maximum protection against these diseases, you need to use the hormones for more than five years and possibly for the rest of your life — which, according to the Harvard study, may mean you're more likely to develop breast cancer.

What other problems may be associated with HRT? Oestrogen by itself also increases the risk of cancer of the lining of the uterus (called the endometrium). This risk disappears if you are also prescribed progestogen. Women who have had their womb removed (hysterectomy) don't need to take progestogen as well.

Tablets: The most commonly prescribed method. In addition to daily oestrogen, you should also take progestogen for at least 12 days a month unless you've had a hysterecto You have to remember to take tablets every day and which ones to take on which day.

Some common types of hormone therapy:

Side effects

The possible side-effects of HRT, such as bloating, bleeding, breast tenderness, abdominal and leg cramps, weight gain, headaches and nausea, can be unpleasant and may put many women off. However, these side-effects often settle after a few months.

If you're taking tablets, adjusting the dose or trying a different type may help. You could also try a different method of HRT. While pills are the most popular method, skin patches, implants under the skin, vaginal creams, intravaginal rings and injections are also available. Menopause specialists say you should be able to find a method that suits you by trial and error — but you may need a lot of patience.

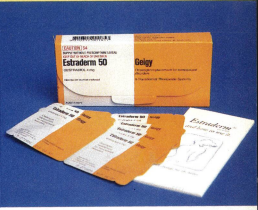
Adding in your personal risk factors

So, given the general pros and cons of treatment, you need to consider your personal risk factors as well as the potential benefits of HRT for you. You may consider its benefits far outweigh its risks if you're much more likely to have a heart attack than develop breast cancer. Risk factors for heart disease include a family history of early death from heart disease, a high blood cholesterol level, high blood pressure, obesity and smoking.

Similarly you may be at a higher risk

aginal creams: Applied to relieve vaginal ryness. Their main drawback is that the mount of oestrogen absorbed through the aginal wall is very variable and the body ay absorb too much or not enough to lieve symptoms. They can also be messy.

Implants: Pellets are inserted under the skin and left in for three to 12 months to release hormones into the bloodstream. It's impossible to predict just how long they'll work, so they are replaced when symptoms reappear.



Patches: Filled with hormone gel, which is gradually absorbed into the bloodstream, they're stuck onto the skin (hip, thigh or abdomen) like a plaster every three or four days. They may irritate the skin of some women.

of osteoporosis than breast cancer — possibly because your mother or sisters have osteoporosis, you had an early menopause (before 45), your diet has been low in calcium for a long time, you don't exercise, you smoke or bone scanning shows you have low bone density.

If, on the other hand, you have breast cancer or a family history of breast cancer, you may feel it's wiser to avoid HRT. If you're over 50 you should have regular mammograms and breast examinations whether you're on HRT or not. If you do develop breast cancer, the earlier it's detected and treated the better.

Discuss your options with your doctor: whatever decision you make, you're the one who has to be comfortable with it — it's *your* decision.

If you choose not to take HRT or your doctor advises against it because you have (or have had) breast cancer, severe liver disease, very high blood pressure or some other medical problem, you can still reduce your risk of heart disease and osteoporosis (as well as other disorders) in other ways.

Exercising regularly (it should be weight-bearing, such as walking, to reduce the risk of osteoporosis), eating a nutritious diet (rich in vegetables, fruit and calcium but low in fat), and avoiding both smoking and drinking too much alcohol will all reduce your risk.

If you're not satisfied with your GP's responses to your questions or views on HRT, you may want to get a second opinion, or decide to seek advice from a Family Planning Association clinic or the menopause clinic of a major public hospital.

Protein powders

THERE'S AN EVER INCREASING number of protein supplement powders on the market, and despite the fact they're an unnecessary addition to the diet, they're very popular.

The supplements are mostly bought by athletes and body builders who believe the extra protein will help them build muscle bulk and give them extra energy. But complex carbohydrates are the best source of energy and, if you want to build muscle, you're better off working out at the local gym.

Although body builders need more protein while building up muscle mass, the amount required is more than covered by a normal diet. The average person — including athletes — needs about 1 g of protein a day per kilogram of body weight, which is nearly always provided by the average diet, unless you're a strict vegetarian who eats no animal products.

A recent article in the Dietitians Association of Australia newsletter regarded the supplements as overpriced and unnecessary. It compared the cost of a common protein powder supplement to other sources of protein bought in a local supermarket.

It found the supplement, which cost around $1 per 30 g serve, provided only 11.1 g of protein. On the other hand, 30 g of skim milk powder, which also provides 11.1 g of protein, cost only about 13 cents a serve. And a dollar's worth of skinless baked chicken breast provides about 25 g of protein, while $1 worth of tuna in brine gives about 30 g.

Protein powders are usually a combination of two or more of the following: milk protein, egg protein, soy protein, sugars, flavouring and vegetable gums. Buying powdered skim milk and adding sugar and flavour would give you much the same result at a much cheaper price.

If it's energy you need, carbohydrates like rice, bread, potatoes and pasta are the best source. ❑

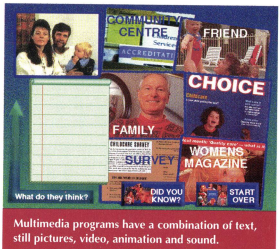
What is multimedia?

Multimedia is a term used widely by the computer industry and the media, but its meaning isn't always clear.

MULTIMEDIA REFERS TO THE use of more than one kind ('medium') of communication to convey a message — even the magazine you're holding now can be considered multimedia, since it uses both words and pictures to deliver information.

The computer industry uses the term to refer to programs which utilise a combination of text, still pictures, video, animation and sound. Another important feature of most multimedia software is that it's interactive. By using a mouse, touch-screen or keyboard to enter information, you can affect the outcome of the program.

While multimedia has attracted big dollars from both business and government, it's unlikely it will ever totally replace other methods of distributing information, such as magazines or television. A well designed multimedia encyclopaedia, with video and sound recordings, may be fun and easy to use, but most people would find reading a novel from a computer screen tedious and hard on the eyes.



Multimedia programs have a combination of text, still pictures, video, animation and sound.

What's it useful for?

While multimedia isn't the answer for everything, it's good for some types of information.

There are now thousands of commercial multimedia software packages available, covering everything from learning languages to 'adult' topics. Here's an overview of some of the areas in which you're likely to come across multimedia.

■ **Education:** Because multi-media programs are usually fun to use, they can also make learning fun. A lesson about dinosaurs is much more interesting when students are presented with pictures and animations of dinosaurs, instead of pages of writing and still pictures. But it's not only children who benefit — workplace training is another emerging area for multimedia. It's not suitable for all types of training, though it has been used to teach people how to handle workplace emergencies and business communication skills, for example.

■ **Electronic books:** At the moment electronic versions of books are mainly being used to replace big paper-based compilations such as company procedures manuals or personnel guides.

WHAT DO YOU NEED TO RUN MULTIMEDIA?

Any computer that can display pictures and play sounds is capable of running at least basic multimedia programs, but to get any real sense of what multimedia can do, you need a computer that's capable of displaying colour graphics, playing back sound and music, and is connected to a CD-ROM drive. A fast processor and plenty of memory help software run more smoothly.

Most computer systems are advertised on the basis of certain specifications — what we quote in the next few paragraphs provides some examples. All you need to do in order to compare models in shops or newspaper ads is to check whether a model has the specifications stipulated — you don't need to know what they mean!

■ If you're planning to buy a PC-compatible (also known as IBM-compatible) computer, you should at the very least consider a system which complies with the MPC (Multimedia Personal Computer) Level 2 standard. This specifies a 486-class machine, four megabytes of RAM, 160-megabyte hard drive, 16-bit sound card, a double-speed CD-ROM and VGA monitor.

Because computer technology moves so quickly, even this type of system may have problems running some of the newer multimedia titles. We suggest a 486 DX33 machine, though a 486 DX4/100 or more powerful computer, such as a Pentium, is preferable. A minimum of eight megabytes of RAM is required to run many multimedia titles comfortably.

If you already own a computer system, check to see how well it handles various programs. If it's too slow you may need to upgrade the processor or memory (this can cost anywhere from around $200 to well over $1000, depending on your current system and what you would like to upgrade to).

■ Most current-generation Macintosh systems can comfortably run multimedia software, and some models have built-in CD-ROM drives. If you're buying a secondhand machine, buy one with at least a 68030 processor, four megabytes of RAM and a colour monitor.

■ Amiga is a possible third computer option, though new models are scarce in Australia at present — they've only just gone back into production. We've been told new machines will be available by the end of this year. Both the Amiga 1200 and 4000 can be used for multimedia applications. While there is some great software available for creating your own multimedia presentations, there's not as wide a range of more general multimedia titles as there is for PC or Macintosh.

There are also more mainstream multimedia titles available, including a few computer-based encyclopaedias and dictionaries, which provide you not only with information about a certain topic, but also with pictures, video footage and sounds.

■ **Games:** There are a lot of multimedia games available. The combination of graphics, sound and speech can make games more realistic and allows them to go beyond the cliché 'shoot-em-up' type of computer game in terms of sophistication.

■ **Presentations:** If you're giving a speech or sales presentation, using computer-based multimedia can be an effective way of increasing the impact. There are various software packages on the market which allow you to create your own multimedia presentations. Overhead transparencies have been used for this purpose for some time; multimedia just offers more scope.

■ **Kiosks:** A kind of electronic information booth, a kiosk consists of a specially modified computer system, usually located where there's lots of passing traffic, such as a shopping centre or museum. It can be used by passers-by to find out about a company's products and services, or in the case of a museum, about an exhibit. ❑

■ A CD-ROM drive allows your computer to read information stored on CD-ROMs, and since most multimedia software requires lots of storage space, it often comes on CD-ROM. They look similar to the more common audio CDs found in music shops.

While they can store a large amount of information — including still pictures, video, animation and sound — you can't add your own information to them. ('ROM' means 'read-only memory' — you can't write things into the memory as well as read from it, unlike with your computer's hard disk and conventional floppy disks.)

The faster the CD-ROM drive, the better. The first models were 'single-speed' drives. If you're buying a new drive, buy at least a 'double-speed', but consider a triple or quadruple-speed drive — they may be more expensive, but you'll appreciate how much faster they are.

18th SUBSCRIBER DRAW

For new subscriptions and renewals received October 1 to December 31, 1995.

Our 18th draw will be held January 15, 1996. Two lucky winners will win prizes from tests published in CHOICE, April 1995.

1st Prize: Dishwasher valued at up to $1700.

2nd Prize: 51cm colour television valued at up to $800.

Eunice and Alan McMullen of Sydney had been thinking about buying a new washing machine when they came up trumps in the 16th subscriber draw.

As first-prize winners they now have a Hitachi washing machine, and they're delighted to finally replace their older, smaller machine.

Eunice said her family regularly refers to their "two foot high" pile of CHOICE magazines — especially now their daughter is pregnant. The washing machine was the first prize they'd ever won. "I'm thrilled, I think it's great," she said.

Second-prize winner Fiona Guest of Victoria was also pleased to have won in the draw. She now has a Braun Food Processor and a Ryobi lawn trimmer, which she's looking forward to putting to work in her garden.

Fiona has been subscribing to CHOICE for six years and said finding out she'd won second prize had made her day. She said she finds the test articles helpful when buying new products and also enjoys the research articles on consumer issues.

Winners of our 15th subscriber draw were Marjorie and William Stokes of NSW, who received an AEG washing machine and Voxson mobile phone.

Congratulations to all our winners — we wish you many happy years' use from your prizes.

Use the order form overleaf

CONDITIONS OF ENTRY

1. The winner will be drawn from new subscriptions and renewals from personal subscribers (including members and donors of gift subscriptions) received October 1 to December 31, 1995. If you opt for a two-year subscription, you'll be entered on your first anniversary as well as when you actually renew or subscribe. 2. Information on how to enter and prizes forms part of these conditions of entry. 3. Employees, and their immediate families, of the Australian Consumers' Association and its associated companies and agencies are ineligible to enter. 4. Entrants must be residents of Australia. 5. Applications are subject to a verification check and the judge's decision is final. No correspondence will be entered into. 6. The prizes will be delivered free anywhere within Australia. 7. Prizes cannot be taken as cash. 8. South Australian residents may enter the draw by completing the form and posting to: Reply Paid No. 24, ACA, 57 Carrington Road, Marrickville NSW 2204, without subscribing to the magazine. Only one entry per person is permissible through this method. 9. Last date for receipt of entries to the draw is December 31, 1995. No responsibility accepted for lost, late or misdirected mail. 10. The draw will be conducted at the office of the Consumers' Association at 10 am on January 5, 1995. 11. The winner will be notified by letter and published in the earliest feasible issue of CHOICE after that. 12. The promoter is Australian Consumers' Association, 57 Carrington Road, Marrickville NSW 2204. NSW permit No. TC95/4577 issued on 1/9/95, ACT Permit No. TP95/1881 issued under the Lotteries Ordinance on 4/9/95, NT No. NT95/1628 issued on 1/9/95.

Order Form

Send to:
Australian Consumers' Association
57 Carrington Road
Marrickville NSW 2204

Phone Subscriptions: (02) 558 8088
General: (02) 558 0099
Fax: (02) 559 3260

Subscriptions	Cost $		Qty Self	Qty Gift	Amount
Choice	1 year 48	Personal			
	2 years 89				
	1 year 66	Institution			
	2 years 124				
	Overseas subscription add $12 for 1 year and $22 for 2 years				
Consuming Interest	1 year 27	Personal			
	2 years 50				
	1 year 35	Institution			
	2 years 67				
	Overseas subscription add $6 for 1 year and $10 for 2 years				
Travel	1 year 27	Personal			
	2 years 50				
	1 year 35	Institution			
	2 years 67				
	Overseas subscription add $6 for 1 year and $10 for 2 years				
Health Reader	1 year 50	Personal			
	1 year 72.50	Professional/Institutional			
	Overseas subscription add $12 for 1 year and $22 for 2 years				

CHOICEFax	Cost $		Qty	Amount
Single article	6	Subscriber		
	16	Non-Subscriber		

Article title: .....

Issue Date: ..... Fax No: .....

Filing systems	Cost $		Qty Self	Qty Gift	Amount
Box holders	12 each	Red			
		Green			
		Blue			
Folders	12 each	Red			
		Black			
		Grey			
				Total	

Payment method

I wish to pay by ☐ Cheque ☐ Money Order
(payable to Australian Consumers' Association)
☐ Bankcard ☐ Mastercard ☐ Visa Expiry date /

Card number

Name on card .....Signature .....

Mr/Mrs/Miss/Ms .....

Address .....

.....Postcode .....

Include me in Subscriber Draw ☐ Yes ☐ No Telephone .....

Gift recipient details

Mr/Mrs/Miss/Ms .....

Address .....

.....Postcode .....

Gift card to read: .....

To .....From .....

Send gift renewal notice to me ☐ Yes ☐ No

To speed your order, attach your CHOICE mailing label or write in your subscription number .....

IL 9511 INS

Calling all subscribers: an easy way to pay

You can now pay for your CHOICE subscription by automatic direct debit from your bank account. Whether you're a new or existing subscriber, if you'd like to pay this way just call us with your account details and we'll send you the authorisation form.

Automatic subscription saves you the trouble of writing out a cheque or authorising an account debit or credit card withdrawal every year. You simply authorise us once, then we just notify you each year that your subscription is due and we'll be withdrawing the money on a certain date. You only have to respond to the notice if you want to change any details or cancel your subscription. Of course you can stop the automatic debit any time you like.

If you're already an automatic subscriber, please remember to let us know if your card number or bank account details change. We get over 50 credit card rejections each month, which causes unnecessary hassle for both you and us. Just give our subscriptions department a call with the details. Give them a call too if you'd like to change over to automatic subscription. All subscribers changing to automatic renewal receive our 32-page CHOICE Food Tips booklet as a bonus.

■ **The number to call: (02) 558 8088.**

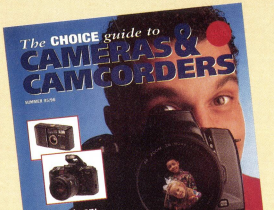
Do you need a good holiday?

CHOICE Travel takes you behind the brochures and gives honest, down-to-earth advice on where to go, what's to do there, and how to get the most out of your travel dollar.

Travel is produced by the UK Consumers' Association and reprinted by CHOICE four times a year. While its reports are from the perspective of a European base, much of the information in them is just as useful to an Australian travelling in Europe and the USA, with occasional forays further afield. There's quality information about different regions, accommodation, specialities of local cuisine, sights to see, as well as places to avoid and tips on dealing with holiday hassles.

A subscription to *Travel* costs just $27 a year — you can use the form on this page to subscribe. The latest issue features:

- Crete
- French canals
- The Italian Tyrol
- Edinburgh

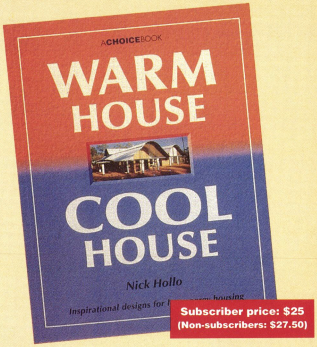


Subscriber price: $9
(Non-subscribers: $10)

The CHOICE Guide to Cameras & Camcorders

We are pleased to announce a new version of this guide based on research by European consumer organisations. It contains results of unbiased tests on compact cameras, SLRs, camcorders, single-use cameras and accessories, almost all of which are available in Australia. With this guide, you'll be able to judge which features are worth having and which are just expensive gimmicks. You'll also find advice on what to do if your photographic equipment doesn't come up to scratch or if your photos or videos don't come out quite as you expected.

Softcover 96pp **Code: CGCC**



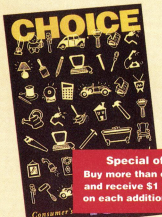
Subscriber price: $25
(Non-subscribers: $27.50)

Warm House Cool House

Inspirational designs for low-energy housing

Warm House Cool House gives a simple explanation of the principles of energy-efficient housing, with more than 110 examples from around Australia. Whether you're planning to renovate, build or buy, this book will offer you inspiration and ideas on how to make any house anywhere a comfortable and attractive place to live in all year round, while keeping electricity, gas and water bills comfortably low. It's extensively illustrated with photos, sketches and plans, including 12 pages of colour photographs.

Code: WHCH

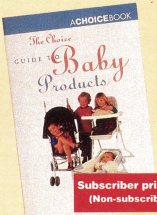


Special offer!
Buy more than one copy and receive $1 discount on each additional copy.

The Choice Consumers' Diary

Our popular diary returns for 1996. Conveniently sized (15 x 21.5 cm), it features: a week to an opening; a practical spiral binding that allows it to open flat on your desk; useful information, addresses and CHOICE consumer tips; monthly expense planners; and a names and addresses section.

$15 spiral-bound **Code: 1996**



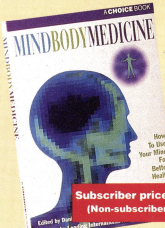
Subscriber price: $14.50
(Non-subscribers: $16)

The CHOICE Guide to Baby Products

Third edition

The *CHOICE Guide to Baby Products* gives invaluable specific and general advice about what to look for (and look out for) when buying for your baby. It starts with a checklist of what parents will need when the baby arrives, and then gives reports of tests and surveys that have been carried out for CHOICE.

Code: CGBP



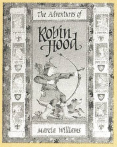
Subscriber price: $31.50
(Non-subscribers: $35)

Mind Body Medicine

How to use your mind for better health

The evidence is rapidly growing that thoughts, beliefs and emotions can have a major impact on your physical well-being. In this book more than 30 scientists and scholars from some of the United States' most prestigious medical institutions present their findings on the interrelationships between mind and body.

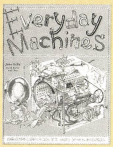
Code: MBM



The Adventures of Robin Hood

The latest title from the author/illustrator of the popular *Greek Myths*. The tales of Sherwood Forest are told in amusing comic style for young and not so young readers.

$20 **Code: TARH**

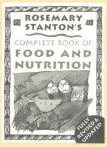


Everyday Machines

Amazing devices we take for granted

This funny and imaginative book explains (with a little bit of artistic licence) how some of the things we use every day actually work. Some of the items included are the VCR, the vacuum cleaner and the doorbell. Said to be for ages 8–12, but we think that could be stretched a lot further.

$20 **Code: EDM**



Rosemary Stanton's Complete Book of Food and Nutrition

Revised edition

This is an A-Z guide to food and nutrition that can answer most of your questions on food in its easy-to-read style. Rosemary Stanton is one of Australia's best-known and most respected nutritionists.

$30 **Code: RSFN**

ORDER FORM

Code	Title	Qty	Item price	Total price
	Plus postage and handling ($3 for one item plus $1.20 for each extra item)			
			Total	

I enclose: ☐ cheque ☐ money order (payable to the Australian Consumers' Association)

OR: I wish to pay by: ☐ Bankcard ☐ Mastercard ☐ Visa Expiry date: ____/____

Card no. | | | | | | | | | | | | | | | | |

Signature _____

Mr/Mrs/Miss/Ms _____
First name Last name

Address _____ Postcode____

Phone (business hours)_____ Subscriber no. _____

SEND YOUR PAYMENT TO:
Australian Consumers' Association
57 Carrington Road, Marrickville 2204.
Phone: (02) 558 0099 Fax: (02) 559 3260

POSTAGE & HANDLING
$3 for one item plus $1.20 for each extra item ordered. Some books may have to be sent separately to keep postage costs down. This is due to Australia Post's vagaries, not ours. Please allow 3 to 4 weeks for delivery. We process the vast majority of orders the day we receive them, but sometimes stock replenishment means a delay while we await delivery, so please bear with us. If any order cannot be filled for a substantial length of time, we'll let you know and give you the option of cancellation.

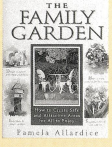
MONEY BACK GUARANTEE
If you are not completely satisfied with your purchase, return book(s) within 30 days for full refund of the purchase price.

1M9511 INS

Take it to the Max

Board games are social games, and this one is no exception. *Take it to the Max* requires players not only to answer general-knowledge questions (about Australia) but also to answer dilemma questions as either Max Walker (who is one of the authors) or themselves. A lot of fun for teenagers and adults.

$45 **Code: TITM**

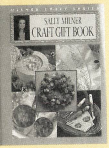


The Family Garden

How to create safe and attractive areas for all to enjoy

A garden for the family has to consider a lot of things: a range of ages and uses, the furniture, the plants, pets and safety. This book looks at all these issues and provides inspiration and advice on getting the perfect garden for everyone in your family.

$35 **Code: FG**



Sally Milner Craft Gift Book

Fifty craft gift ideas from some wonderful Australian craft books. It includes easy-to-understand diagrams and instructions and beautiful photographs of what the projects can look like. It's a great way to make gift-giving (and making) even easier.

$40 Code: SMGB

The Good Gift Guide

Creative gift-giving for all occasions

Gift-giving can be a wonderful experience; it can also be torture to find that special present. *The Good Gift Guide* not only has wonderful ideas for gifts for all sorts of occasions, it also includes information about wrapping, cards and last-minute gifts.

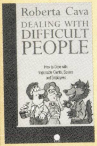
$17 Code: TGGG

Let's Go Shopping

Simon Clews' international mail order guide

Mail order shopping is a popular way of getting what you want without going out of your way. *Let's Go Shopping* guides you through the range of international products (and catalogues) that are out there waiting for you.

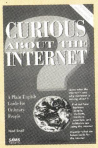
$15 Code: LGS



Dealing with Difficult People

We all have to deal with them — 'difficult' people. You can learn useful strategies from this book — by using effective communication skills and behaviour, you will be able to cope when you encounter those difficult people.

$13 Code: DWDP



Curious About the Internet?

If you're still unsure about the information superhighway and want more details before you commit yourself, *Curious about the Internet?* will answer your questions. It includes information about the Internet, how it works, who uses it and what you can use it for.

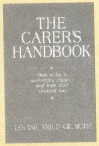
$29 Code: ATI

Oz Internet

A guide to connecting to the Internet in Australia

This Australian book explains how to connect to the Internet and how to use its full potential. It provides a list of information suppliers and a sample software disk. Note: to use this disk you will need a PC, a modem and to sign up with an access provider.

$35 Code: OZIT

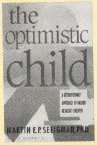


The Carer's Handbook

How to be a successful carer — and look after yourself too

This book offers help to carers in a sensible, no-nonsense style. It discusses improving communications, managing stress, the practical day-to-day demands of being a carer, dealing with diseases and death, and external help.

$18 Code: TCHB

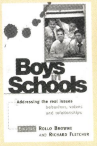


The Optimistic Child

A revolutionary approach to raising resilient children

Depression and lack of confidence can afflict children, and if not acted upon in childhood can be carried on through life. Martin Seligman looks at what can be done to help children attain meaningful optimism and confidence that can help them throughout their lives.

$20 Code: OC



Boys in Schools

Addressing the real issues – behaviour, values and relationships

Problems facing boys in schools include bullying, gender stereotypes, low self-esteem, homophobia and peer pressure. These problems and attitudes will affect every student's quality of education in some way. It looks at some of the innovative techniques being used to combat them.

$20 Code: BIS

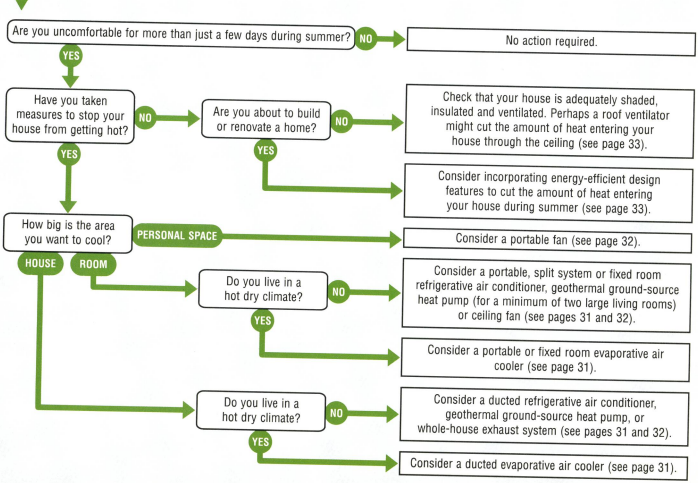
Keeping cool

You can take measures to stop your home getting too hot. If you're still not cool enough, there are several options for a cooling system, many of them reasonably inexpensive.

MAKING YOUR HOUSE ENERGY-EFFICIENT CAN HELP YOU KEEP COOL during summer, as well as cutting your cooling costs and consumption of electricity. Shading windows, installing insulation and ventilating your house can stop it from getting so hot. Incorporating energy-efficient design into your new home or renovation can help you go even further. See *Keeping heat out* on page 32 for details.

How you decide to keep your house cool depends on your situation and your personal preferences. It also depends on the local climate and how much money you're willing to spend.

To help you decide on the best way to keep cool this summer, follow the flowchart below to find out the options available to you. To find out more information about the various cooling options, read *Cooling it down*, right, for a brief overview. Keep in mind that in many cases a combination of these measures will provide you with the best cooling solution.


Are you uncomfortable for more than just a few days during summer?
NO
No action required.
YES
Have you taken measures to stop your house from getting hot?
NO
Are you about to build or renovate a home?
NO
Check that your house is adequately shaded, insulated and ventilated. Perhaps a roof ventilator might cut the amount of heat entering your house through the ceiling (see page 33).
YES
YES
Consider incorporating energy-efficient design features to cut the amount of heat entering your house during summer (see page 33).
How big is the area you want to cool?
PERSONAL SPACE
Consider a portable fan (see page 32).
HOUSE
ROOM
Do you live in a hot dry climate?
NO
Consider a portable, split system or fixed room refrigerative air conditioner, geothermal ground-source heat pump (for a minimum of two large living rooms) or ceiling fan (see pages 31 and 32).
YES
Consider a portable or fixed room evaporative air cooler (see page 31).
Do you live in a hot dry climate?
NO
Consider a ducted refrigerative air conditioner, geothermal ground-source heat pump, or whole-house exhaust system (see pages 31 and 32).
YES
Consider a ducted evaporative air cooler (see page 31).

Cooling it down

Refrigerative air conditioners (heat pumps)

What are they? Based on the system used in refrigerators, this type of air conditioner works by pumping heat from inside the house to the outside. As part of this process, they not only cool, but also remove humidity, as well as filtering and circulating air around the home.

Some refrigerative air conditioners — reverse-cycle models — can also pump heat into the house from outside, so they can be used for heating during winter.

Area suitability: Refrigerative air conditioners are effective in any climate. They are particularly useful in humid areas as they can help reduce humidity. Unfortunately, some models can be quite noisy.

Types available: There are four main types of refrigerative air conditioner available: portable, fixed room, split system and ducted system.

■ **Portable:** Generally consists of two parts connected by a flexible hose through a partially open window or external door. They are mobile, and plug into a standard power socket. They are suitable for rooms up to 20 m^2. Purchase cost: $800–$3000.

■ **Fixed room:** These are fitted into external walls or windows. They're suitable for single rooms or areas up to 60 m^2. Purchase cost: $500–$3500. See our test of models up to 3 kW capacity (appropriate for a bedroom or small lounge room) on page 35.

■ **Split systems:** These consist of fixed indoor and outdoor sections, and are ideal for use where no suitable window exists to fit an air conditioner into. They are also quieter indoors than other refrigerative systems. Split systems are suitable for one or more rooms, up to approximately 75 m^2. Purchase cost: $2000–$5000.

■ **Ducted systems:** These are mounted in the roof or outside on the ground and are connected to duct work. Suitable for whole home cooling. Purchase cost: $5000+.

You can cool the whole house with a ducted air conditioning system; the controls are centrally located.

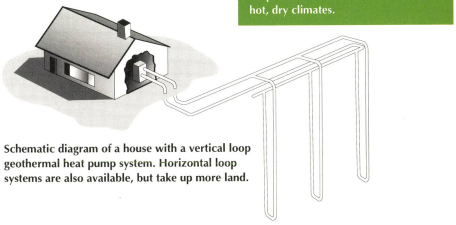
Geothermal heat pumps

What are they? Like refrigerative air conditioners, geothermal heat pumps work by pumping heat from one area to another. However, instead of exhausting the heat to the outside air, geothermal systems pump it into the ground.

This is done using a series of pipes buried in the ground, called a ground loop. During summer the ground temperature is cooler than the outside air; during winter the ground is warmer than the outside air. This means a geothermal heat pump is more efficient at transferring heat than a conventional air conditioner.

In addition to heating and cooling, geothermal systems can also provide hot water. While the cost of purchasing and installing a system may be more expensive than other types of refrigerative air conditioner, the operating costs are lower. These systems are suitable for cooling your whole house, though they can be used to cool specific parts of it if you prefer a smaller system.

Area suitability: Because ground temperature doesn't usually vary much, geothermal systems can be used effectively even in areas with extreme outside air temperatures. Purchase cost (including installation): $7000–$20,000.



Schematic diagram of a house with a vertical loop geothermal heat pump system. Horizontal loop systems are also available, but take up more land.

Evaporative air coolers

What are they? Air is drawn by a fan through wet filter pads and out into the house. As the water evaporates it takes heat from the air, thus reducing the temperature.

Area suitability: Evaporative air coolers work best in low-humidity areas where the air is hot and dry. Their effect is limited in high-humidity areas.

Types available: Portable, fixed room, and ducted whole-house.

■ **Portable:** These are usually mounted on castors and are suitable for rooms of up to 25 m^2. They are plugged into a standard power outlet and manually filled with water. They are best positioned near an open window or external door, with another opening on the opposite side of the room. Look for models with a water level gauge, variable fan speed and directional louvres. Purchase cost: $200–$400.

■ **Fixed room:** Fitted into an external wall or window, this type of evaporative air conditioner is permanently wired and plumbed in. They should be installed towards prevailing summer winds and are suitable for large open areas (30–50 m^2). Purchase cost: $1000– $1300.

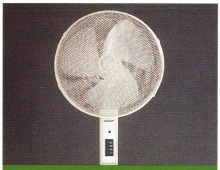
■ **Ducted whole-house:** These systems are installed in the roof and ducted to ceiling outlets to cool rooms throughout the house. Windows must remain open during operation. Purchase cost: $2000–$3000.

Evaporative air coolers work best in hot, dry climates.

Fans

What are they? Fans don't actually lower the room temperature or humidity, but they can create a cooling effect by helping to evaporate your body's perspiration.

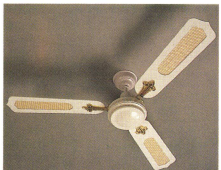
Types available: Portable and fixed ceiling.



Larger 40 cm diameter fans are better for moving air round the room; smaller models just cool one or two people.

■ **Portable:** These can be easily moved around, and are available as desk, box or pedestal models. They require a standard power outlet and are suitable for personal cooling. Purchase cost: up to $100.

■ **Fixed ceiling:** These are permanently wired to the ceiling and should be installed by an electrician. They consist of three or four blades, and usually have a variable speed control. Purchase cost: $50–$200.



A ceiling fan can help evaporate perspiration, making you feel cooler.

Whole-house exhaust systems

What are they? Fresh air is drawn into the house through open windows and doors by a fan mounted in the ceiling in a central part of the house. In the process, hot air in the house is drawn into the roof cavity and released outside through vents in the eaves. While not actually lowering the temperature, the circulation of air creates a 'breeze' effect which helps to evaporate perspiration on the skin, as well as exhausting the hot air from inside the house. Purchase cost (includes installation): $2500–$3000.

Area suitability: Unlike evaporative air coolers, whole-house exhaust systems can be used in areas of high humidity and work best when there is a substantial difference between inside and outside temperatures, such as during the night.

Keeping heat out

HEAT ALWAYS MOVES FROM A HOTTER region to a colder region. In summer, it's generally hotter outside during the day, so heat flows into the home.

By stopping the heat from getting into your house in the first place, you can avoid buying expensive cooling equipment.

Insulation

In summer, insulation helps reduce the amount of heat entering your home through ceilings and walls. Compared to an un-insulated home, an insulated building requires less energy for cooling and heating. As much as 35% of the heat in your house enters through the ceiling, while between 15% and 25% enters through uninsulated walls.

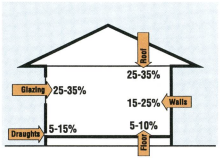
For insulation to work effectively during summer, it's important to provide external shading (see *Shade*, right) for windows and adequate ventilation for kitchens and other areas with major heat-generating appliances, so heat doesn't become trapped inside your home.

There are three main types of insulation: bulk, reflective foil and structural/decorative.

■ **Bulk insulation** consists of a material with millions of tiny pockets of air inside it, which acts as a means of insulation. It is available in the form of batts, blankets and loose fill. Batts and blankets are available in a range of materials, such as fibreglass, polyester, mineral wool, sheep's wool and polystyrene (batts only). Loose-fill insulation is available in two main types: cellulose fibre and granulated rockwool.

■ **Reflective foil insulation** is made from aluminium foil, which reflects large amounts of heat while absorbing and emitting only small amounts of radiant heat.

■ **Structural or decorative insulation** includes products such as wood wool panels, compressed straw panels, fibreboard, Caneite, and wall cladding.



The amount of heat that enters through uninsulated walls and ceilings.

Shade

Providing shade for your house, particularly for windows, can help keep your home cool in summer. Sunlight entering through windows causes furniture, furnishings and other objects inside a house to heat up. That heat is then trapped inside.

The best way of stopping solar energy is before it enters your home, by providing shade. External shading devices can be grouped into three types,

Windows that face west need shading that blocks out the sun in summer but lets it into the home in winter.

according to how they work, including those that stop:

- Overhead sunshine — such as eaves, awnings, canopies, projecting horizontal fins, horizontal louvre systems, verandahs and pergolas.
- Horizontal sunshine — such as blinds, vertical louvre systems and projecting vertical fins.
- Both types of sunshine — such as diagonal louvre systems, adjustable awnings, perforated screens, metal meshes, shutters, blinds, trees and shrubs.

Trees are a particularly useful device for providing shade. Deciduous trees, especially when planted to the north of your house, will shade it and keep it cool during summer. When they lose their leaves during winter, they let the sunshine through to warm your house.

Energy-efficient house design

An energy-efficient home is designed to take advantage of the sun's energy, and has simple design features that keep it warm during winter and cool during summer. Essentially, the aim is to build a house which will admit and store the sun's energy when it's needed (during winter), and exclude and remove heat from the house when it's not needed in summer.

The main factors which determine comfort levels of your house during summer are:

- Location, orientation and layout.
- Position and treatment of windows.
- Construction materials.

A typical energy-efficient house will:

- Be elongated and have one of the long sides facing north.
- Have large north-facing windows which admit winter sunshine, but can easily be shaded in summer.
- Have a concrete slab floor and/or internal brick walls; these provide thermal mass, which helps even out temperatures throughout the year.
- Have small windows on the east and west sides, and adequate shading for these windows in summer.
- Be weathertight and well insulated.

CHOICE Books recently published a book, *Warm House Cool House*, which looks at energy-efficient house design — see *Consumer Bookshelf* on page 27.

Ventilation

If you live in a hot and humid area, ventilating your home can make it feel cooler during summer; air moving through the rooms will make it more comfortable because it will help evaporate perspiration.

If you're planning to build a new house or renovate an existing one, you have a chance to improve airflow through your house. During the design stage you can take into account features such as orientation of the house and windows to take advantage of breeze paths, location and height of fences, and planting of trees and shrubs.

If you live in a hot dry area, it's best to close all windows and doors during the day to stop heat getting in, and open them at night or as soon as the outside temperature falls. This allows the building to cool down at night.

Roof ventilators

What are they? Roof ventilators are designed to stop the roof cavity from getting too hot, thus cutting down the amount of heat transferred through the ceiling into your house.

Types available: Wind turbine, static vents and motorised fan.

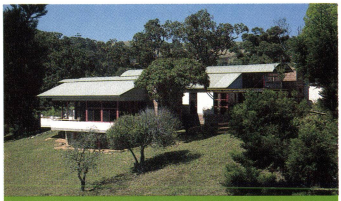
- **Wind turbine:** These rely on outside air to spin a turbine which draws up hot air from the roof cavity. This type of roof ventilator relies on winds, so it may not be effective in areas with little or no wind during summer. Cost: $95–$575.
- **Static vents:** As air passes over these vents, a region of low pressure is created, drawing the hot air out of the roof cavity. Even with no wind, as long as there is a temperature difference between the roof cavity and the outside, air will be drawn out through the process of convection. Cost: $45–$310.
- **Motorised vents:** An electrically driven fan, powered by either solar or mains electricity, draws air out of the roof cavity. Some models have a thermostat which turns the fan off when the roof cavity is sufficiently cool. Cost: $65–$500. ❑

FURTHER INFORMATION

This article was researched with the help of various energy information centres around Australia. Prices for refrigerative air conditioners, evaporative air coolers and fans are courtesy of Energy Victoria's Energy Information Centre.

If you want more information about keeping your house cool, contact one of the energy information centres found in most states:

- **New South Wales:** Energy Information Centre, phone (02) 247 1144.
- **Northern Territory:** Department of Mines and Energy, phone (089) 82 7148.
- **Queensland:** Energywise Advisory Centre, phone 1800 175 518.
- **South Australia:** Energy Information Centre, phone (08) 204 1888.
- **Tasmania:** Integrated Energy Management Centre, phone (002) 73 3355.
- **Victoria:** Energy Victoria, phone (03) 412 6886.



Design features of an energy-efficient house keep it warm in winter and cool in summer.

A wind turbine roof ventilator: hot air is drawn up out of the roof cavity so less heat is transferred through the ceiling.

Where does your Consuming Interest begin?

THE LAST EDITION OF *Consuming Interest*, our policy and consumer action magazine, looked at the issue of smart cards. If you missed it, you may have heard us talking about them on the radio — it was a popular subject. Here we provide both a follow-up and a preview of what's in the current issue of the magazine.

Privacy protection — the consumer issue of the '90s

What's in a name? If it happens to be yours and it's made available to any number of corporations for marketing purposes, then nothing less than your privacy is at stake. Our story on smart cards, the future in microchip-based credit cards, generated an unprecedented level of interest from consumers, the media, policymakers in government, and companies.

It's no wonder people are concerned. This new high-tech product is being trialled around the country as we write, and Australia is a regulation-free zone when it comes to privacy protection in the private sector.

We knew we'd touched a nerve when a major political party virtually duplicated our press release calling for world-class privacy laws, and when schoolchildren wrote in for more information on smart cards.

We'll make privacy and data protection — in financial services, health care, communications and information technology — top priorities over the coming years, because we know they're of great concern to Australian consumers, and because we know we can achieve a lasting result.

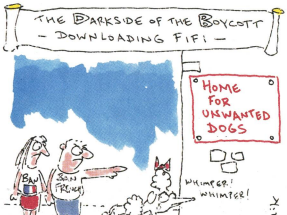
There will be an article on smart cards in an upcoming issue of CHOICE.

Boycott!

The cover story for the latest *Consuming Interest* provokes thought — how do you choose to exercise your consumer power?

We take readers to the heart of a perennially controversial consumer matter — the boycott. From its historical roots to its most modern use, the boycott raises passions more than just about any other consumer issue. Which tactics work? Who benefits and loses? What are the most successful boycotts?

We invite you to join us for a history of consumer activism which is bound to capture the imagination of informed consumers, no matter what your political convictions might be. With French



nuclear testing in the Pacific on the minds of many Australians, we profile the case for boycotting French products, argued by the Australian Conservation Foundation, and the case against, argued by the French Chamber of Commerce.

Microsoft — the empire strikes again

Australia has one of the highest take-up rates for new technologies in the world. Responding to this consumer demand, the Consumers' Association has made communications/information technology a new policy priority.

We look forward to leading the charge for consumer rights in 'cyberspace', even if it means taking on Microsoft. Our caution to consumers on the launch of Windows 95 — which provided a voice of reason in the midst of the hype — was a first step. Now join us as the plot thickens.

A revolution is occurring in information technology as the Microsoft empire spreads into our homes and leisure time. Microsoft has brought order to the once chaotic computer industry. Now the information supergiant hopes to dominate consumer access to the information superhighway with its Microsoft Network, a joint venture in Australia between itself and Telstra.

Our article brings the debate down to earth, providing a plain-English approach to the subject and introducing the views of computer enthusiasts, Internet service providers, computer science students and, of course, of Microsoft Network.

The republic unplugged

This issue of CHOICE discusses the monarchy vs republic debate (see page 16) in terms of the issues that need to be considered — they are not being clearly explained, with all their implications, in most media coverage. *Consuming Interest* takes the debate further.

Leading academics, activists and community leaders join us to discuss the monarchist model and republican options for change. We consider citizens' rights, environmental matters, ethnic perspectives and Aboriginal points of view.

Hot letters

In our last issue we printed pointed exchanges between the Consumers' Association and four major companies (Toyota, Fly Buys, Myer Grace Bros and Over 50s). This month we expose more heat behind the scenes. Which bank's solicitors have written to us twice over the past six months? And why? ❑

Reverse-cycle air conditioners

Looking for relief from the summer heat? A reverse-cycle air conditioner will do the trick — but make sure you pick the right size for your room.

You don't have to put up with uncomfortable draughts to keep cool if you buy an air conditioner with adjustable fan speed and louvres.

MANY PEOPLE CONSIDER AN air conditioner to be the only really effective way of cooling a room on a very hot day. However, if you can control other aspects of your home's environment, such as insulation, shade and ventilation, you may be able to stay comfortably cool with only a fan or open windows instead — see *Keeping cool* on page 30 for more information.

Reverse-cycle air conditioners — also known as heat pumps — work by transferring heat from one area to another. Using a system similar to a refrigerator's (they're called 'refrigerative' air conditioners), a reverse-cycle air conditioner pumps heat from inside your house to the outside. This keeps your house cool during summer and also lowers humidity levels. They can also pump heat from the outside air into your home, to warm it during winter.

We tested 14 reverse-cycle air conditioners to find out which ones provided the best cooling and heating performance, energy efficiency and ease of use, while still being quiet enough for you to sleep or hold a conversation. The type of air conditioner we tested is usually mounted in an exterior window or wall, so that part of the unit is inside the house and most outside.

We picked all the models on the market with a 'cooling capacity' of less than 3 kW — models of this size are suitable for cooling a bedroom or small lounge room. See *The right size* on page 37 for tips on getting the right capacity for the area you want to cool.

Within the small capacity range of the models in this test (from 1.9–2.7 kW for cooling capacity), it's probably true to say bigger is better, which is reflected in our ranking. However, a much larger-capacity model in the same-sized room wouldn't be better again — see *The right size* for more information.

Compared to other types of cooling system, such as fans or evaporative air coolers, reverse-cycle air conditioners have higher running costs. For heating, however, they are more energy-efficient than an electric radiator or fan heater, although many people prefer these other types of heater because they make less noise. Of the tested models, the **CARRIER, EMAILAIR GM084H, KELVINATOR KR08MG** and **WESTINGHOUSE WR08F** are the cheapest to run when heating; the latter three are also the cheapest for cooling.

DRAWBACKS AND GOOD FEATURES

■ A potential problem when heating with reverse-cycle air conditioners is that they may ice up during very cold conditions, which means they won't warm your room very well. To overcome this problem, most of the air conditioners we tested — except the **SANYO** and **BRADWAY** — have a defrosting or de-icing mode, which works by heating the iced-up areas.

According to **HITACHI**'s rather garbled instructions, even though this model has a de-icer, it shouldn't be used when the outside temperature falls below 5°C. So reverse-cycle air conditioners may not be satisfactory for people relying on them for heating in very cold areas.

■ Air conditioners like these have a reputation for being noisy — most are loud enough to interfere with normal conversation. We measured both indoor and outdoor noise levels. The **TOSHIBA** is the quietest model indoors, with a noise level of 56 dB (normal conversation is around 60 dB). The **CARRIER** achieved the lowest outside noise level of 63 dB (better for your neighbours).

■ All the models have a filter, which cleans the air as it is sucked in. To keep the air conditioner working at maximum efficiency we recommend that you clean the filter at least every two weeks. It can be removed from most models by sliding it out from the bottom or side.

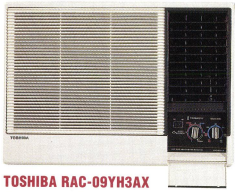
However, the filter on the **EMAILAIR GM084H, KELVINATOR KR08MG** and **WESTINGHOUSE WR08F** can only be removed by unscrewing the front panel, which is unnecessarily fiddly. Given the hassle involved in removing and replacing this filter, it's unlikely many people would clean it as regularly as they should.

■ The **SANYO** has an 'energy saver' setting, which is designed to minimise energy consumption. If this mode is selected during cooling, the temperature will rise by 1°C after about 30 minutes to save energy. Besides possibly lowering energy costs, this feature may be useful for people who set the air conditioner before they go to bed, as the slight increase in temperature will provide a more comfortable sleeping environment.

WHAT TO BUY

	TOSHIBA RAC-09YH3AX	$950
equal	**CARRIER** 77QRA009	$1075
equal	**HITACHI** RA3107CH	$1000
	SANYO SA-91AH5W	$875

We've profiled the top four models in our test. Prices shown are a good target to aim for when shopping around, based on nationwide checks in July 1995. Anything lower is a bargain.



TOSHIBA RAC-09YH3AX

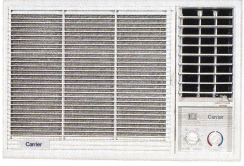
Target price: $950

Good points

- High maximum airflow rate, to get the whole room to the desired temperature faster.
- High heating capacity, which will help warm the room quickly.
- Relatively quiet indoors and out.
- Easy to clean filter.
- Oscillating louvres, which help distribute the air more evenly.

Bad points

- None to speak of.



CARRIER 77QRA009

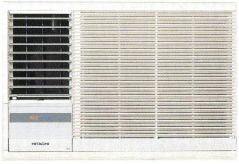
Target price: $1075

Good points

- Very energy-efficient for both heating and cooling.
- Relatively quiet outdoors.
- Oscillating louvres, which help distribute the air more evenly.
- Has three airflow settings for greater versatility.

Bad points

- None to speak of.



HITACHI RA3107CH

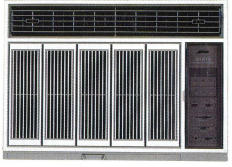
Target price: $1000

Good points

- High maximum airflow rate, to get the room to the desired temperature faster.
- Good energy efficiency score for heating.

Bad points

- None to speak of.



SANYO SA-91AH5W

Target price: $875

Good points

- Has an economy setting — see page 35.
- Has a 12-hour timer with auto-start/auto-stop feature.
- Has three airflow settings for greater versatility.
- Highest maximum airflow rate, which helps get the room to the desired temperature faster.
- High cooling capacity, which also helps to cool the room fast.

Bad points

- No defrost/de-icing mode for running in cold conditions.

Using a reverse-cycle air conditioner

- To maintain maximum efficiency, clean the filter at least every two weeks or as often as the manufacturer recommends during periods of use.
- Windows and doors must be shut when a refrigerative air conditioner is being used, to allow the cooling room air to be recirculated. Fireplaces should also be sealed off.
- Try to locate the air conditioner in an area where it is shaded from direct sunlight, such as on the south side of the house, or install an awning or canopy to provide shade.
- Insulation (especially ceiling insulation) and blinds, awnings or shutters will reduce the amount of heat entering the house, and cut the amount of work the air conditioner needs to do to cool your house. In winter the insulation will keep the heat in the room, reducing the work required to heat it.
- Set the thermostat to give temperatures of around 25°C in summer, and around 20°C in winter, to help provide comfortable conditions that aren't too much at odds with outside temperatures and to minimise energy consumption. The high-speed fan setting is usually only needed when you first switch on the air conditioner to speed up cooling or heating, though in extreme conditions you might need to keep it running on the maximum airflow setting.

The right size

It's important to select an air conditioner with the right cooling and heating capacity for the room in which you want to install it. Buy one too small, and it will have problems getting the whole room to the desired temperature. Choose one that's too big, and not only will it cost more to buy and run, but it may cool the room too quickly to be able also to reduce the humidity, making it uncomfortable. It will also cycle (turn itself on and off) more often, and may increase the chance of breakdown.

The following factors play a part in deciding the correct-sized unit for your needs. You need to know these details when shopping for a reverse-cycle air conditioner:

- Dimensions of the area you intend to air condition, preferably with a floor plan.
- What the building is made from.
- Orientation of the room(s).
- The size and area of windows, and the type of shading, if any.
- The size and shape of doorways.
- Insulation type (roof, ceiling and walls).
- The main uses of the area; bathrooms, laundries, halls and storerooms are not normally air-conditioned, while bedrooms generally need less capacity than lounge rooms of the same size.
- Number of people normally occupying the space.

Using your ceiling and floor area, wall lengths and window area, you can calculate the capacity of air conditioner you need. The cooling estimator below is useful for providing a rough guide as to the capacity you'll require.

Cooling estimator

Conditions of room(s) to be cooled	Calculation	
1. Ceiling area (A) in square metres: A =.....		
If uninsulated	A x 20 =	
If insulated	A x 10 =	
2. Floor area (A) in square metres: A =.....		
Open or non-air-conditioned space below	A x 20 =	
Slab floor on ground, enclosed crawl space or air-conditioned space below	A x 0 =	0
3. Internal wall lengths (L) in metres (add them together): L =.....		
When adjacent space is air-conditioned	L x 0 =	0
When adjacent space is not air-conditioned	L x 40 =	
4. External wall lengths (L) in metres (add them together): L =.....		
With foil insulation	L x 25 =	
If uninsulated cavity brick	L x 55 =	
If uninsulated brick veneer or weatherboard	L x 65 =	
If uninsulated cement sheets (eg fibro)	L x 80 =	
5. Window area (WA) in square metres		
For windows with north or east aspect: WA =.....		
If shaded externally or screened by vegetation	WA x 120 =	
If double-glazed or floor to ceiling curtains	WA x 120 =	
If external blinds or awnings	WA x 160 =	
If internal blinds or half-length curtains	WA x 300 =	
If no shading at all	WA x 400 =	
For windows with west aspect or skylight – calculate as above, then multiply by 2	=	
For windows with south aspect – calculate as above, then divide by 2	=	
6. Room used mainly for:		
Sitting	add 800 =	
Cooking	add 1200 =	
Sleeping	add 400 =	
	Total =	
	Divide by 1000	

The final figure is in kW and is an estimate of the cooling capacity you require.

Based on the CSIRO publication *Room heaters and Coolers — choosing the best size.*

What to look for

- Before you buy an air conditioner, try to stop your house from getting so hot in the first place. Most of the solar radiation entering your home during summer can be stopped by making sure it's adequately shaded and insulated. Even if these measures don't solve your heat problems, they might make using an air conditioner more effective (see *Keeping cool* on page 30).
- How well an air conditioner cools or heats a room is dependent on two main factors: **capacity** and **airflow rate**. We tested models with a capacity of up to 3 kW, which is suitable for a bedroom or small lounge room. If you want to heat or cool a larger room, look for a higher-capacity model (see *The right size*, left). Air conditioners with a higher maximum airflow will cool or heat a room faster and help to achieve a more even temperature.
- To conserve electricity and save money on running costs, select a model with a high level of energy efficiency and low energy consumption. Check our table to determine which of the models tested are the most energy-efficient. When you're shopping, check the energy rating sticker (see *Energy labelling* overleaf).
- If you'd like to set your air conditioner to switch on and off at particular times, look for a model with a timer.
- Adjustable or oscillating louvres can help distribute the air so that the room is more evenly cooled or heated. They can also help prevent hot or cold spots in a room.
- Multi-speed fans allow you to select a higher speed for faster air circulation or a low speed once the room is cool and you don't want to sit in a draught.
- If you live in a cold area, select a model with auto defrost to avoid problems with it frosting up in winter.

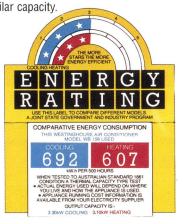
Reverse-cycle air conditioners

	Brand/model (in rank order)	Manufacturer/ distributor	Origin	Target price ($)*	1 Warranty (years)	Dimensions – H x W (mm)**	2 Max wall thickness (mm)	3 Yearly running cost – heating/cooling ($)	4 Airflow rate (L/sec)	5 Cap hea coo (kW
	TOSHIBA RAC-09YH3AX	Teco/Bradway	not stated	950	not stated	400 x 565	220	52 / 54	136	2.8
equal	**CARRIER** 77QRA009	Carrier	Korea	1075	5 *(B)*	380 x 565	245	38 / 49	101	2.4
	HITACHI RA3107CH	Hitachi	Malaysia	1000	2 + 5	380 x 560	285	47 / 53	137	2.7
	SANYO SA-91AH5W	Sanyo	Singapore	875	1 + 4	435 x 605	215	50 / 54	139	2.5
	EMAILAIR GM105H	Lovelock Luke	Australia	900	5	410 x 565	260	52 / 51	133	2.6
equal	**KELVINATOR** KR10MG	Email	Australia	850	5	410 x 565	260	52 / 51	133	2.6
	KELVINATOR KR10MB	Email	Australia	850	5	410 x 565	260	52 / 51	133	2.6
	WESTINGHOUSE WR10F	Email	Australia	900	5	410 x 565	260	52 / 51	133	2.6
	FUJITSU AKT 9R	Fujitsu General	Taiwan	900	2 + 3	360 x 460	255	56 / 55	97	2.8
	MITSUBISHI MWH08GV-A	Mitsubishi Electric	Thailand	850	5	350 x 525	255	46 / 52	83	2.3
	BRADWAY RAR 100 *(A)*	Teco/Bradway	not stated	900	2 + 3	350 x 555	165	41 / 50	98	2.1
	EMAILAIR GM084H	Lovelock Luke	Australia	750	2 + 3	340 x 475	150	38 / 41	86	1.9
equal	**KELVINATOR** KR08MG	Email	Australia	700	2 + 3	340 x 475	150	38 / 41	86	1.9
	WESTINGHOUSE WR08F	Email	Australia	700	2 + 3	340 x 475	150	38 / 41	86	1.9

* Prices shown are indicative of the range found in nationwide checks in July 1995. They do not include installation.
** Dimensions have all been rounded up to the nearest 5 mm to make sure you'll measure a space large enough to fit them.
(A) This model has been discontinued, but may still be available in some shops.
(B) Parts, not labour.

Energy labelling

All refrigerative air conditioners with an output capacity of less than 7.5 kW must have an energy rating label. As part of the national Energy Labelling Program, these labels are designed to provide shoppers with comparative information about the energy efficiency of models of similar capacity.


MORE STARS MORE ENERGY EFFICIENCY
ENERGY RATING
USE THIS LABEL TO COMPARE DIFFERENT MODELS
A JOINT STATE GOVERNMENT AND INDUSTRY PROGRAM
COMPARATIVE ENERGY CONSUMPTION
THIS WEST'INGHOUSE AIR CONDITIONER
MODEL WR 198 USED
COOLING
692
HEATING
607
kWh PER 500 HOURS
WHEN TESTED TO AUSTRALIAN STANDARD 1881
CONDITION A: THERMAL CAPACITY TYPE TEST
• ACTUAL ENERGY USED WILL DEPEND ON HOW
YOU USE AND MAINTAIN THE APPLIANCE GUIDE
• APPLIANCE RUNNING COST INFORMATION IS
AVAILABLE FROM YOUR ELECTRICITY SUPPLIER
OUTPUT CAPACITY IS :-
3.35kW COOLING 3.15kW HEATING

The label for reverse-cycle models has two bands of stars. The blue band shows how energy-efficient the air conditioner is during cooling, and the red band shows its efficiency when heating. The more stars there are, the more energy-efficient it is.

There are also two energy consumption numbers — one for cooling and one for heating. The blue number indicates the amount of energy used during 500 hours of cooling (the equivalent of having the air conditioner cooling for around four hours a day for four months of the year). Similarly, the red number indicates the amount of energy used during 500 hours of heating. The lower the numbers, the less energy the air conditioner uses.

You can approximate the cost in dollars for 500 hours of operation by dividing the energy consumption number on the label by 10 (this assumes your electricity costs are around 10 cents per kWh).

How reliable are they?

We surveyed a sample of our subscribers to ask them about the reliability of their air conditioner; we asked if it had needed repairs in the previous 12 months. The results are given below for brands where we had more than 50 responses; the number in brackets is the number of air conditioners of a particular brand reported on by subscribers in the survey.

On average, 11% of air conditioners in the sample had needed repairs during the past year. Note that the results of the survey are for all types of air conditioner, not just for the type included in our test — reverse-cycle air conditioners in fact tended to be more reliable than other types.

Brand (sample size)	% not needing repair
Panasonic/National (169)	98
Sanyo (51)	94
Fujitsu (77)	93
Westinghouse (99)	93
Mitsubishi (85)	91
Emailair (104)	87
Kelvinator (188)	87
Carrier (169)	85

We also asked our survey respondents if they would buy the same brand of air conditioner again.

Brand (sample size)	% who would buy again
Mitsubishi (85)	98
Panasonic/National (169)	95
Fujitsu (77)	91
Emailair (104)	90
Carrier (169)	89
Kelvinator (188)	88
Sanyo (51)	88
Westinghouse (99)	86

6 Heating capacity score (%)	6 Cooling capacity score (%)	7 Energy efficiency score: heating (%)	8 Energy efficiency score: cooling (%)	9 Ease of use score (%)	10 Quietness score (%)	11 Overall score (%)	Brand/model (in rank order)	
93	86	76	69	75	47	74	**TOSHIBA** RAC-09YH3AX	
81	88	97	86	60	33	72	**CARRIER** 77QRA009	equal
91	84	86	70	65	40	72	**HITACHI** RA3107CH	
84	91	68	78	50	33	70	**SANYO** SA-91AH5W	
87	76	68	62	70	33	66	**EMAILAIR** GM105H	
87	76	68	62	70	33	66	**KELVINATOR** KR10MG	equal
87	76	68	62	70	33	66	**KELVINATOR** KR10MB	
87	76	68	62	70	33	66	**WESTINGHOUSE** WR10F	
95	86	68	67	55	33	65	**FUJITSU** AKT 9R	
77	69	67	50	80	43	61	**MITSUBISHI** MWH08GV-A	
70	68	69	52	45	20	53	**BRADWAY** RAR 100 *(A)*	
62	63	64	64	40	23	52	**EMAILAIR** GM084H	
62	63	64	64	40	23	52	**KELVINATOR** KR08MG	equal
62	63	64	64	40	23	52	**WESTINGHOUSE** WR08F	

Clones
Some models are identical in performance, though sold or badged under a variety of names. These groups of 'clones' are indicated in the brand/model column by a square bracket to the right of their names.

1 Warranty
The first (or only) figure is the warranty for the machine as a whole. Most companies provide additional warranties on the sealed refrigeration system and/or the compressor, and this is the second figure quoted. In some cases this additional warranty refers to parts only and doesn't include labour costs.

2 Maximum wall thickness
This figure is relevant if you're going to mount the air conditioner in a wall rather than a window. It's the distance between what must be inside the room (front panel, power cord and internal air inlets) and what must be in the open air (external air inlets). If your walls are thicker than this, you'll have to cut away an extra section of the outside wall so the air intake is not affected.

3 Yearly running cost
These figures are based on the energy use for 500 hours of operation for heating and the same for cooling in one year on the maximum settings. These energy consumption figures are then divided by 10 to produce an approximate yearly running cost in dollars (assuming electricity costs 10 cents per kWh).

4 Airflow rate
A higher maximum airflow means the cool or warm air is distributed faster and more evenly around the room, and this is likely to achieve a more uniform temperature.

5 Capacity
This is an indication of how well the air conditioner will be able to cool or heat the appropriate size of room (in this case a bedroom or small lounge room). See *The right size* and the *Cooling estimator* on page 37 for details of how to calculate what capacity of air conditioner is right for your room.

6 Airflow and capacity scores
The heating and cooling capacity scores are based on the heating and cooling capacity measurements (see column 5 in this table). Likewise, the airflow score is based on the airflow rate (see column 4). Within the limited capacity range in this test, generally speaking bigger is better, but see *The right size* for the limitations of this in a broader context.

7 Energy efficiency score: heating
The heating test involved simulating a winter's day with an outside temperature of 7°C and an inside temperature of 21°C. The score is based on how energy-efficient the air conditioner was at maintaining this inside temperature.

8 Energy efficiency score: cooling
The cooling test simulated a summer day with an outside temperature of 35°C and inside temperature of 27°C. Like the heating test, the cooling score was based on the energy efficiency with which the inside temperature was maintained.

9 Ease of use score
This score is a combination of the ease of using the controls and the ease of gaining access to the filter and cleaning it.

10 Quietness score
The higher the score, the quieter the unit. We decided indoor noise level is more important to the buyer than outside noise level, and it's this score that's given in the table. However, if you have neighbours nearby who are likely to be annoyed by a noisy air conditioner, the loudest on the outside was the **FUJITSU**, while the quietest were the **CARRIER** and **TOSHIBA**. All the models were louder outside than inside.

11 Overall score
We used the seven scores in the table to make up the overall score. We weighted cooling more than heating because evidence suggests more people use air conditioners for cooling than for heating.

- Airflow: 10%
- Heating capacity: 10%
- Cooling capacity: 20%
- Heating efficiency: 10%
- Cooling efficiency: 20%
- Ease of use: 10%
- Quietness: 20%

Electric lawnmowers

For some lawns an electric mower is a better choice than petrol — but some models do the job better than others. This report sorts them out.

THE MARKET FOR ELECTRIC lawnmowers is relatively small — only about 15% of total mower sales — but it's growing. Lawn sizes are shrinking as people move into town houses, units and dual-occupancy properties, and it's estimated that a third of lawn owners today could be using an electric mower quite happily.

At the time we tested there were only six electric mowers on the market — five of them from the same manufacturer. However, these models will satisfy different needs — this test sorts out the best and the situations they're suited to.

ELECTRIC vs PETROL

We included a typical well-performing petrol mower as a comparison in this test, to see how well electrics compare.

Petrol models are good for:

■ The basic task — grass-cutting performance. The petrol mower beat all the electrics — although the best electric model, the **FLYMO E400**, wasn't far behind it. The difference is most noticeable in longer grass conditions; in shorter grass most electric models handle the task perfectly well.

■ Changing the cutting height — on most petrol models it's adjusted by moving a single lever, a very simple operation. On the electric mowers tested, changing the cutting height involved anything from removing the cutting blade with a spanner and placing spacers under it, to unscrewing all four wheels and relocating them in different positions. Luckily, changing the cutting height isn't something most people do every time they mow the lawn.

■ No power cord — which is probably the biggest disadvantage of electric mowers. You have to cut in a set pattern or you're constantly flicking the cord out of the way. In yards with lots of trees and other obstacles you're forced to backtrack all the time to avoid tangling. You may need to change power points to reach all areas of the yard, or you may not be able to reach that distant corner at all. What's more, the cord always seems to be tangled when you want to use it.

There's also the risk of running over the power cord. The mowers are double-insulated and the risk of electrocution is very small, but we still advise using a safety switch and wearing solid shoes.

Electrics are good for:

■ Ease of use — particularly the hover type — although a couple of our electric models were worse to use in some ways than the petrol mower. Most electric mowers are smaller, lighter and easier to start: you simply plug them in, press the 'lock-off' button and squeeze the lever.

■ They vibrate a lot less than petrol mowers, which makes them less of a trial to use.

■ They don't require the use (or storage) of messy fuel and oil.

The main thing when deciding between a petrol and electric mower is to select the appropriate one for your situation. An electric mower wouldn't be the best choice for a large yard that tends to get overgrown, but would be ideal for a small yard with few obstacles that is mown regularly.

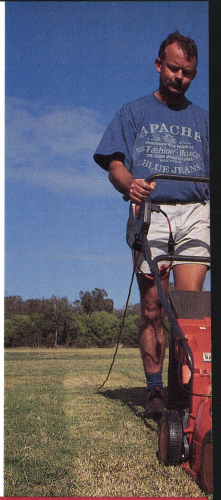
HOVER vs WHEELED

The electric hover mower has been around for years, and you can now get a hover mower with a catcher. You can also buy wheeled models with a catcher. What's the difference?

Hover mowers work on the principle of sucking in air and blowing it out the base of the mower. This lifts the mower slightly so that it glides around on a cushion of air, making it very easy to push and manoeuvre. They can be pushed in a straight line or used in a side-to-side sweeping motion, and are particularly handy — used with care — on slopes and banks.

They can also generally be hung on a wall for storage, which can be a definite advantage in a small yard where there's no room for a large garden shed.

Once you're used to them, hover



We tested the mowers on a good few acres of grass, but in reality an electric model is best for fairly small lawns without many obstacles.

mowers are very pleasant to use, although they do have some drawbacks. In very leafy situations some models tend to suck leaves onto the air intake, blocking the air flow, which results in loss of lift and makes the mower harder to push (see photo below). This happens very quickly, which means you're constantly having to stop to unblock the intake.

Hover mowers: with some models, leaves easil block the air intake, making them harder to pus

What to look for

- Decide whether you want a petrol or electric mower, based on the size of your yard, any obstacles you have to mow round and whether you can safely store petrol. See *Electric vs petrol*, opposite, for the pros and cons of each.
- A large motor won't automatically mean the mower cuts grass better. If everything else is equal, it should, but other factors make a difference too: cutting diameter, shape of the mower body, size and position of grass exit chute, etc. Don't be persuaded to buy a model with a bigger motor if some of the significant aspects listed below don't satisfy you.

Electric mowers

- Lift the mower up in the shop: it should be light enough for you to carry or push to the lawn, and if it has wheels they should roll smoothly.
- The handle height should be comfortable for you; adjustable handles are best.

There should be a cord restraint to prevent accidental disconnection of the power cord.

- The controls should be located conveniently and feel comfortable in your hands.
- There should be a 'lock-off' button to prevent accidental starting, and a thermal cutout to protect the motor in case it's overloaded. Check the box or ask the salesperson.
- If possible, try to find a model with a power cord that's long enough for your yard so you won't have to add another cord or keep changing power points.
- Check how easy it is to change the cutting height (preferably without needing tools) and blades.
- Are the air vents (which prevent the motor from overheating) wide enough to be cleaned easily by hand if they get blocked by leaves or grass? On hover mowers the inlet vent for the hover fan should also be fairly large, and when the vents wrap over the top of the mower body rather than only being on the sides they're less likely to get blocked by leaves.
- Catchers should hold a large amount, with a wide opening for easy emptying, and they should be easy to fit and remove.

Petrol mowers

For petrol models many of the same criteria apply, as well as the following.

- How easy is it to refuel?
- How easy will it be to do routine maintenance, such as changing spark plugs and oil (if applicable).
- If you can start it up in the shop, check if it's easy to start, and for vibration.

You also have to carry them to the grass, as they have no wheels and can't easily be pushed along the ground when they aren't running. This isn't a major problem with smaller models, but the larger models may be a little heavy for some people.

Most hover mowers don't have a catcher, so if you want a tidy lawn you'll have to rake up after mowing.

If you prefer a wheeled mower, both large and small versions are available. The smaller models we tested were very easy to push and manoeuvre, but they can't be regarded as serious mowers except in very light grass conditions.

WHICH ARE THE BEST?

■ The **FLYMO E400** stands out as better than the rest. It cut well in all the grass conditions in the test, even reasonably well in 30–40 cm long grass. For a hover mower it's quite big, but it's easy to use, although a little heavy to carry. It would be suitable for people with larger yards who tend to let the grass get a bit overgrown at times.

■ Next best was the **FLYMO E300**, a smaller version of the **E400**. It cuts well in short to medium-length grass, but tends to slow in the longer stuff. Its biggest advantage is its ease of use — it's a light mower that glides across the lawn effortlessly. It would be most suitable for small to medium-size lawns that are mown regularly to keep the grass reasonably short.

The **FLYMO E400** and **E300** are both recommended, so the model you choose would depend on your own situation. The **E300** is around $125 cheaper, so if you think it fits your lawnmowing pattern it would be a good buy. Neither has a catcher.

■ If you prefer a conventional wheeled catcher mower, the **FLYMO RE400** is the best alternative. It rates about the same as the **E300** for grass cutting but it isn't quite as easy to use as either of the two recommended hover mowers. Overall it's still adequate for well-kept lawns and is the best of the wheeled catcher models tested.

WHAT TO BUY

■ **For larger lawns and/or longer grass:**
FLYMO E400 ..... $350

■ **For smaller well-kept lawns:**
FLYMO E300 ..... $225

■ **If you prefer a wheeled mower with a catcher:**
FLYMO RE400 ..... $410

Profiles

Mowers are profiled in rank order. Prices shown are a good target to aim for when shopping around, based on nationwide checks in August 1995. Anything lower is a bargain.

FLYMO E400

Target price: $350
Type: Hover
Suitable for: Larger lawns and/or longer grass.
Cutting performance: Best overall — even OK for long grass.

Good points

- Easy to push and manoeuvre. While not the best for overall ease of use, it still rates well.
- Can be hung on a wall for easy storage.
- Large cutting diameter, which can speed up mowing.
- Well designed air inlet for the fan means it's less likely to get blocked when mowing very leafy areas.

Bad points

- Inconvenient to adjust cutting height — requires a spanner.
- No catcher.
- Must be carried to the lawn, and it's a little heavy.
- Air filter a little difficult to clean.

FLYMO E300

Target price: $225
Type: Hover
Suitable for: Smaller well-kept lawns.
Cutting performance: Good in short to medium grass but not suited to longer lengths.

Good points

- Equal easiest mower to use, very easy to push and manoeuvre.
- Easy to carry.
- Can be hung on a wall for easy storage.

Bad points

- Inconvenient to adjust cutting height — requires a spanner.
- No catcher.
- Must be carried to the lawn.
- Narrow cutting diameter.
- 15 m power cord is 5-10 m shorter than those supplied with the other models.
- Air filter is a little difficult to clean.
- Air inlet for fan blocks up when mowing leafy areas.
- Does not have an overload cutout.

FLYMO RE400

Target price: $410
Type: Wheeled with catcher
Suitable for: Larger lawns that are mown regularly, and if you want a catcher.
Cutting performance: Good in short grass, OK in medium grass, but not suited to longer lengths.

Good points

- Equal easiest to adjust cutting height, with a lever for each wheel.
- Large cutting diameter, which can speed up mowing.
- Large catcher.
- Air filter easy to clean.

Bad points

- Relatively heavy.
- Not quite as easy to use as most of the others, but still acceptable.
- Grass chute blocks up in longer or damp grass, and needs to be cleared by hand.
- Does not have an overload cutout.

FLYMO TURBO COMPACT 350

Target price: $400
Type: Hover with catcher
Suitable for: Very smooth flat lawns that are mown regularly and require a catcher.
Cutting performance: Good in short grass, OK in medium grass, but not suited to longer lengths.
Note: This is a new design in hover mowers, with a catcher located inside the body of the mower; the clippings are sucked up into the catcher, as with a vacuum cleaner. It's good to see a new design being tried but unfortunately the model has a few problems.

Good points

- The only hover mower tested that didn't suffer from blockage of the fan air inlet when mowing leafy areas.
- The only hover mower with a catcher, and you can use it without if you want.

Bad points

- The poorest model tested for ease of use, mainly due to difficulty in pushing on anything but a smooth flat lawn with short grass.
- Difficult to push in a straight line: it tends to wander around and veer off-line, especially when mowing uneven surfaces or when it strikes a thicker patch of grass. And you can't use it with a side-to-side motion as then it won't pick up grass clippings.
- The catcher has a reasonable capacity but doesn't work very well on anything but short grass.
- Inconvenient to adjust cutting height — requires a spanner.
- Very difficult to clean air filter.
- It must be carried or dragged on its built-in roller to the lawn, which isn't easy due to its size and weight. Depending on your height, dragging on the roller can also be tiring because of the angle you have to hold it at.
- Can't easily be hung on the wall for storage, like other hover mowers.

FLYMO RE300

Target price: $330
Type: Wheeled with catcher
Suitable for: Small yards with very short sparse grass that is mown regularly and requires a catcher.
Cutting performance: Equal poorest — motor slows in anything longer than very short sparse grass.

Good points

- A small mower that's easy to push and manoeuvre. Rates equal best for ease of use.
- Catcher is a reasonable size.
- Acts as a mulching mower (see *Environmental issues* on page 44 for more information) with catcher removed, and does this efficiently in shorter grass lengths.
- Equal easiest to adjust cutting height — has a lever for each rear wheel and a spring-loaded bar for the front two.

Bad points

- Narrow cutting diameter, which can make mowing slower.
- Mower becomes rear-heavy as the catcher starts to fill up, resulting in the front wheels lifting off the ground.
- Air filter is a little difficult to clean.
- Does not have an overload cutout.

MASPORT K350

Target price: $300
Type: Wheeled with catcher
Suitable for: Small yards with very short sparse grass that is mown regularly and requires a catcher.
Cutting performance: Equal poorest — motor slows in anything longer than very short sparse grass.

Good points

- A small mower that's easy to push and manoeuvre.
- Has a blade rotation indicator — a safety feature that tells you when the blade is turning.

Bad points

- Adjusting cutting height requires each wheel to be unscrewed and repositioned in another hole.
- Narrow cutting diameter, which can make mowing slower.
- Small-capacity catcher.
- Handle length is a little short — people with long legs may kick the catcher as they walk behind it.
- No air filter for motor.
- Blade takes a long time to come to a stop, though Masport says a blade brake will be fitted to models available from late 1995.

Electric lawnmowers

Brand/model (in rank order)	Manufacturer/ distributor	Origin	Target price ($)*	Warranty (years)	Type	Weight (kg)**	1 Number of cutting positions	2 Cutting range
FLYMO E400	Electrolux	UK	350	1	Hover	9	4	10–29
FLYMO E300	Electrolux	UK	225	1	Hover	7	4	10–29
FLYMO RE400	Electrolux	UK	410	1	Wheeled/catcher	20	6	22–75
FLYMO Turbo Compact 350	Electrolux	UK	400	1	Hover/catcher	12	5	0–26
FLYMO RE300	Electrolux	UK	330	1	Wheeled/catcher	10	6	20–58
MASPORT K350	Masport	Italy	300	1	Wheeled/catcher	10	3	25–58

* Prices shown are a good target to aim for when shopping around, based on nationwide checks in August 1995.
** Including catcher if applicable but not power cord.

Environmental issues

■ A good — and easy — way to help the environment is to recycle the grass clippings. If you don't mind the look of it, simply don't use a catcher and leave the clippings on the lawn. If appearance does matter to you, you can use a mulching mower that cuts the clippings up very finely and then disperses them into the lawn. (The **FLYMO RE300** was the only electric mower we found that could be used as a mulcher, but unfortunately its grass-cutting performance leaves something to be desired.)

Both of these methods have the advantage of helping to prevent evaporation, so the lawn needs less watering and feeding and there's less need to fertilise it. Excessive use of fertilisers contributes to algal growth in waterways, due to nutrients dissolved in run-off water ending up in rivers. This is one of the major problems facing some of our rivers today.

If you don't want to leave the clippings on the lawn you can start a compost heap or spread them on the garden. For good information on maintaining a compost heap refer to the December 1994 issue of CHOICE. Whatever you do, it's much better to recycle the clippings than bin them and have them end up as landfill.

■ Both petrol and electric mowers use non-renewable fossil fuels to power them: the petrol type directly, and electric models in that most electricity produced in Australia is generated by burning coal or natural gas. They also contribute to the production of CO_2 through the use of those fuels. In use, however, electric models, unlike petrol ones, produce no fumes that contribute to smog or are unpleasant to breathe. They are also generally noticeably quieter than petrol mowers.

Other types of mower

Besides the electric and petrol mowers discussed in this article there are several other types. No solar mowers are available yet, but this may be the way of the future — we know of at least one solar-powered model being developed.

Battery

Black & Decker produces an electric mower called the **STEALTH**. It has a conventional wheeled/catcher design but is powered by a rechargeable battery rather than a petrol or mains-powered motor. We tested and reported on this model in the November 1993 issue of CHOICE.

While it sounds like a good idea, unfortunately we couldn't recommend the **STEALTH** due to its poor grass-cutting performance and low ease of use. This model is still on the market and was the only battery-operated model available when we did this year's test.

Cylinder

Cylinder or reel mowers are power-driven and have a cylinder, made up of several blades, that rotates around a horizontal axis as the mower moves forward. The blades cut the grass with a scissor-like action.

These mowers are intended for use on very well-kept, smooth lawns and are the type you will often see in use on bowling greens (albeit a larger version). They aren't really suited to rougher types of lawn. You don't see them in many ordinary gardens, though they seem to have a bigger following in WA than elsewhere in the country.

Push

Push mowers are a manual version of the cylinder-type mower. They're suited to small flat areas that are mown regularly. The longer the grass gets, the harder they become to push. They're great for people who want to get more exercise while they're mowing the lawn, they don't use any fuel and they produce no pollution during use. We last reported on push mowers in the November 1991 issue of CHOICE.

Self-propelled

Self-propelled mowers are fairly large wheeled machines. As well as turning the cutting blades, the motor drives the wheels. Their biggest advantage is that you don't have to push the mower, you simply walk behind and guide it. They usually have a large cutting diameter and are suited to large areas. You often see them being used by council workers who have to mow large areas on foot.

Ride-on

Ride-on mowers look like mini tractors. They're not the sort of mower found in the average suburban backyard — they're expensive, difficult to store and an overkill in terms of performance. They're suited to large areas of grass and are usually bought by people with large blocks of land.

4	5	6	7	8	
of cut	**Catcher capacity** (kg)	**Noise at 7.5 m** (dB)	**Ease of use score** (%)	**Cutting performance score** (%)	**Overall score** (%)	**Brand/model** (in rank order)
	not applicable	67	75	83	80	**FLYMO** E400
	not applicable	70	81	72	75	**FLYMO** E300
	4.0	64	73	72	72	**FLYMO** RE400
	2.9	61	62	64	63	**FLYMO** Turbo Compact 350
	2.9	72	81	47	61	**FLYMO** RE300
	2.0	60	79	47	60	**MASPORT** K350

1 **Number of cutting positions**
The length cut from the top of the grass can be varied on all the mowers by adjusting the cutting height so that the mower's blade is closer to or further from the ground. (This is useful if the grass has been left unmown for some time as it's easier to mow long grass in a couple of stages). Most electric mowers are more difficult to adjust than typical petrol mowers.

2 **Cutting height range**
This is the range of lengths the mower will cut the grass to (that is, the length the grass will be after cutting). Note that with the hover mowers the hover effect will increase the stated figures slightly.

3 **Width of cut**
This is the width of the strip of grass that will be cut in one pass of the mower.

A wider cutting path should mean you need fewer passes to cut the whole lawn, speeding up mowing. The FLYMO E400 and RE400 (pictured) had the widest cut in this test.

4 **Catcher capacity**
The amount of clippings a catcher could hold was measured by weighing it empty, mowing until it couldn't hold any more clippings, then weighing it again full. This doesn't necessarily mean your catcher will always hold this weight of grass when it's full, as the exact weight will vary depending on the type of grass and its moisture content at the time. All the catchers were tested in the same grass conditions so the results given are comparative. The larger the figure, the less often you have to empty the catcher.

5 **Noise**
We measured the noise in decibels at 7.5 m from each mower. The quieter ones in this test were regarded as good (for a lawnmower!). By comparison petrol mowers are generally noticeably louder than most electric models.

6 **Ease of use**
To assess ease of use we considered:
- How easy it was to push and manoeuvre the mower on flat, rough and sloping ground.
- How comfortable the handle and controls were to use and whether there was much vibration.
- How easy it was to adjust the cutting height.

Many other aspects of using the mowers were evaluated but not scored. These included: quality of instructions; attaching, carrying and emptying the catcher; maintenance, including changing the blade and cleaning air vents; carrying and storing the mower; how close to a vertical edge such as a fence they would cut. Any points regarded as significant are mentioned in the individual profiles.

We also tested for safety. All the mowers passed the electrical safety tests as well as the foot probe test (a test designed to check that accidental removal of the toes is not likely). The **MASPORT K350** did fail the blade stopping time test, taking 18 seconds to come to a stop, but at the 'pass' mark of seven seconds the blade had very little momentum. (Masport says a blade brake will be fitted to models available from late 1995.)

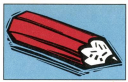
7 **Cutting performance**
To rate cutting performance we used the mowers on a range of different grass lengths:
- Short: 30–40 mm cut to 15 mm.
- Medium: 70–80 mm cut to 30 mm.
- Long: 300–400 mm cut to the highest cutting height on the mower.

They were also tested on damp grass and different types of grass (mainly couch and buffalo). Very little emphasis was given to the cutting of the long grass as electric mowers really aren't meant for this task. A higher weighting was given to the cutting of short grass.

We haven't rated the mowers on their motor size as the cutting performance is what counts. Other factors besides motor size, such as width of cut and design of the mower body and exit chute, will affect the cutting performance.

Some of the characteristics for which mowers were downrated were: giving an uneven cut, requiring a push-pull action to cut properly, motor slowing down and missing patches of grass.

8 **Overall score**
Cutting performance made up 60% of the overall score, the ease of use assessment 40%.



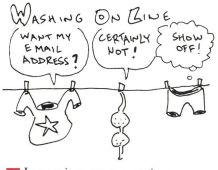
WHAT DO YOU KNOW?

1 In Australia there are legally binding standards to regulate the quality of our drinking water.
True or false?

2 Share trading on the Australian Stock Exchange takes place on a computer system.
True or false?

3 Stuffed cuts of meat may be safely eaten when cooked rare.
True or false?

4 What is an 'on-line service'?
A) A continuous new television channel that will take broadcasting into the 21st century.
B) A service available via a computer and modem that provides information and other goodies to subscribers to the service.
C) A train that stays on the rails.



5 Lean mince must contain no more than what percentage of fat?
A) 3%
B) 8%
C) 10%
D) 15%

6 What percentage of the Schedule fee will Medicare pay for a visit to the GP?
A) 100%.
B) 55%.
C) 85%.
D) 75%.

7 Barrel or canister vacuum cleaners are twice as good at removing dirt as upright vacuum cleaners.
True or false?

8 What is a surfactant?
A) A lubricant for engine parts.
B) A wax for surfboards.
C) The main cleaning agent in detergent.
D) An artificial wave machine.

RECALLS AND BANS

If you find a recall or ban not on our list, please let us know. Companies often rent 008 or 1800 numbers for a couple of months after the recall is announced. If the number given is no longer operating, phone the manufacturer or retailer direct.

Following discussions with the Trade Practices Commission, the following companies have issued customer service notices advising that certain ranges of infants' overalls (also known as coveralls, all-in-ones, romper suits and jumpsuits) do not comply with the Australian Standard for children's nightclothes and flammability warnings. Test results indicate these garments are highly flammable and must be kept away from fire or heat sources. The garments have been on sale in stores' infants' daywear sections, but parents may also be using them for nightwear. If you're concerned, return to place of purchase for a refund or exchange or phone the listed customer service number.
Items affected are:

■ **KMart: NURSERYLAND ROMPER SUITS** (sizes 0 and 1 only, keycodes 25512915 and 25512922). The brushed terry-towelling rompers have long-sleeves and cuffs, a white embroidered or printed front bodice, contrast rib collar or a white Peter-Pan collar with a contrasting picot stitch edge and a back opening with snap fasteners. Inquiries: call 1800 634 251 (Monday to Friday 8 am to 5.30 pm).

■ **Target: INFANTS BRUSHED TERRY TOWELLING COVERALLS** (sizes 0 and 1). Inquiries: phone 008 814 788.

■ **Coles: INFANTS SIMPLY BASICS BRUSHED COTTON POLYESTER OVERALLS** (plain and print, size 0 only). Inquiries: phone (03) 9829 5551.

■ **Fosseys: INFANTS COVERALLS** (code: 261 37667, size 0-1). Inquiries: phone 1800 337 762.

■ **Anuello: 'LITTLE LOVES BY ANUELLO' INFANTS BRUSHED ROMPER OR GROW SUITS** (sizes 0 or 1), sold through clothing stores and major department stores. 'Little Loves by Anuello' appears on the label inside the collar. Inquiries: call 1800 065 892.

ANSWERS

1. False. Governments and water authorities rely on several sets of voluntary guidelines to try to regulate the safety and quality of our water.
2. True. The 'push and shove' of old-fashioned floor trading in shares ceased for most types of stock in Australia in 1990, when a computer system (called SEATS — or Stock Exchange Automated Trading System) came into operation. SEATS enables stockbrokers to buy and sell shares by computer.
3. False. Stuffed meat, mince or sausages that aren't thoroughly cooked shouldn't be eaten, as bacteria can find their way into the middle of the product more easily than in solid cuts of meat, and thorough cooking is needed to ensure they're killed.
4. B. On-line services can be accessed with a computer and a modem. In return for a fee they provide information on specific topics, as well as other services, including news, computer-related information, and access to the Internet. See the September 1995 issue of CHOICE for more information.
5. C. The Australian Food Standards Code defines lean mince as containing no more than 10% fat.
6. C. You have to pay the difference between 85% of the Schedule fee and whatever your doctor charges if he or she doesn't bulk-bill.
7. False. In CHOICE tests, upright vacuum cleaners are usually about twice as good at removing dirt as barrel or canister models.
8. C. A surfactant — short for surface active agent — breaks the surface tension of water, allowing it to wet fibres. It also helps in dissolving fatty substances, so they can be washed away easily.

Change of address
To change your subscription address, please fill in the new address below and return this complete form with your label to the above address or fax.

Name _____

Address _____

_____ **Postcode** _____

Telephone (Business hours) ( ) _____

Address change to be effective from _____

(To make change effective for next month's issue, we need to know by the 15th of this month

Australian Consumers' Association
ACN 000 281 925
57 Carrington Road
Marrickville NSW 2204

Tel (02) 558 0099
Fax (02) 559 3260

Print Post Approved
PP: 224733-00035
PP: 224733-00036
PP: 224733-00037

SURFACE MAIL

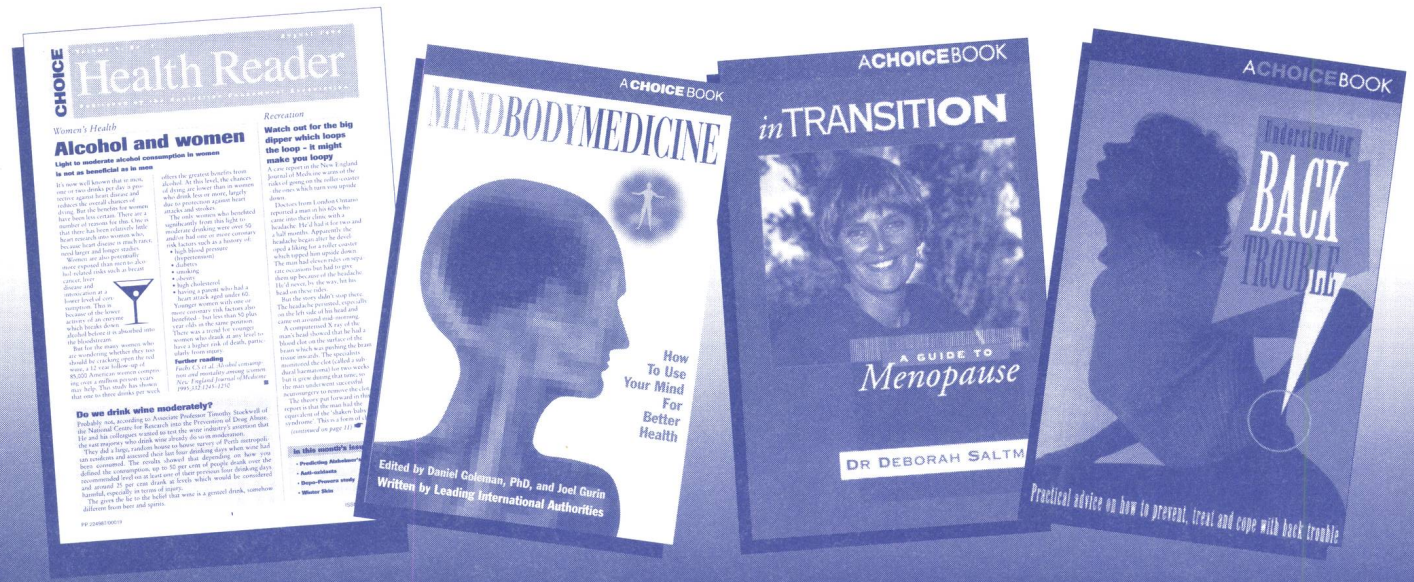
POSTAGE PAID AUSTRALIA

CH9511 P N EXP: 9609 545530*
ROLAND BEERLING *
23 MOROTAI AVE *
ASHBURTON *
VIC 3147*

Send this label with all enquiries

SOME HEALTHY READING CHOICES

FROM **CHOICE** BOOKS
AND **CHOICE** PUBLICATIONS


CHOICE
Health Reader
Alcohol and women
Do we drink wine moderately?
A CHOICE BOOK
MIND BODY MEDICINE
How To Use Your Mind For Better Health
Edited by Daniel Goleman, PhD, and Joel Gurin
Written by Leading International Authorities
A CHOICE BOOK
in TRANSITION
A GUIDE TO Menopause
DR DEBORAH SALTM
A CHOICE BOOK
Understanding BACK TROUBLE
Practical advice on how to prevent, treat and cope with back trouble

SEE OVER FOR DETAILS AND A SPECIAL OFFER FOR SUBSCRIBERS

for you, a selection of healthy reading . . .

CHOICE
Health Reader
Alcohol and women
Watch out for the big dipper which loops the loop - it might make you loopy
Do we drink wine moderately?
A CHOICE BOOK
MINDBODYMEDICINE
How To Use Your Mind For Better Health
Edited by Daniel Goleman, PhD, and Joel
Written by Leading
Subscriber special!
A CHOICE BOOK
in TRANSITION
A GUIDE TO
Menopause
DR DEBORAH SALTMAN
A CHOICE BOOK
Understanding
BACK TROUBLE
Practical advice on how to prevent, treat and cope with back trouble

The CHOICE Health Reader covers in non-medical language, latest developments in medical, nutritional, exercise and general health research as reported in up to 200 international scientifc journals. Published 10 times per year, 12 pp. $50 for individuals, $72 professional; includes postage.

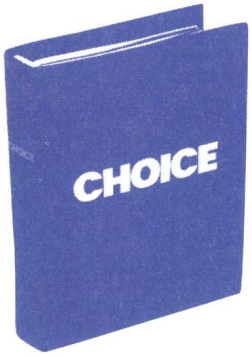
In this book more than 30 scientists and scholars from the US' most prestigious medical institutions present their findings on the interrelationships between mind and body.
Price for non-subscribers $35

Special subscriber price:
$31.50

In Transition covers the issues surrounding menopause in a clear, easy to understand, non-patronising way. Topics include: your relationship with your doctor; HRT; orthodox and alternative treatments.
$17

Three out of four Australians will experience back pain at some stage of their lives. This book explains how your back works, what is likely to go wrong, the treatments available and preventative measures.
$18

Two solutions for keeping your **CHOICE** in mint condition:

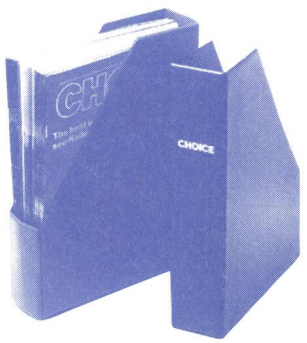


CHOICE subscribers often refer back to previous issues of their magazine for many years.

These sturdy binders and holders will keep this valuable information safe, protected and easy-to-access.

Binder
holds 12 issues of CHOICE
$12 *includes postage and handling*
(available in red, black or grey)

Box Holder
holds 24 issues of CHOICE
$12 *includes postage and handling*
(available in red, green or blue)



Order Form

Yes! I'd like to buy the following healthy product(s):

NB: For book orders only, add **$3 postage and handling** for the first copy and **$1.20** for each additional copy.

. . . . copies **Mind Body Medicine** @ **$31.50** subs/**$35**RRP $ . . . .

. . . copies **In Transition** @ **$17** $ . . . .

. . . copies **Understanding Back Trouble** @ **$18** $ . . . .

. . . subscriptions **Health Reader** @ $50 indv/$72 prof $ . . . .

. . . **CHOICE** Holders @ $12 ❒ Red ❒ Green ❒ Blue $ . . . .

. . . **CHOICE** Binders @ $12 ❒ Red ❒ Black ❒ Grey $ . . . .

Postage and handling $ . . . .

Total $ . . . .

Send your payment to:
CHOICE 57 Carrington Road, Marrickville, NSW 2204
General enquiries: Telephone: (02) 558 0099 Fax: (02) 559 3260

I enclose ❒ cheque ❒ money order

(payable to the Australian Consumers' Association) or I wish to pay by

❒ Bankcard ❒ MasterCard ❒ Visa

Card number

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

Expiry date: . . . . . .Name on card. . . . . .

Signature. . . . . .

Address. . . . . .

. . . . . Postcode. . . . . .

IP9511 INS

Tulcan has issued a public safety warning about TULCAN QUASAR PORTABLE ELECTRIC HEATERS (all electrical models manufactured prior to February 1991; this excludes series E and F). In the event of a power surge or electronic component failure the heater could overheat internally, which could cause it to melt or catch fire. Don't use these heaters. Check the model series printed on the silver sticker located on the lower rear panel) and contact the Vulcan information line on 1800 624 527 (7 am to 7 pm, Monday to Friday).

Bromic has recalled RECA 600 mm LPG HOSE AND REGULATOR ASSEMBLIES, sold since April 1, 1995, either individually or as part of a portable LPG appliance (including barbecues, heaters and camping equipment), as there may be a fault in the joint between the regulator and the hose, which could lead to a slow leak of gas. Affected assemblies have a gold-coloured regulator and a smooth, light-beige hose, which has the brand FITT and/or AGA 5155-8-94 marked along the hose length. If your regulator has a green dot attached to it, the hose and regulator assembly has already been checked and passed and doesn't need to be returned. If your appliance has one of the affected hose and regulator assemblies, don't use it. Turn off the gas bottle and return the assembly (not the whole appliance) to point of purchase for a free replacement, if appropriate. For inquries, phone Bromic on (02) 748 3900 or 1800 655 212 (business hours).

KMart has recalled AP SPORTS AIR 2000 EXERCISE CYCLES, purchased after June 1, 1995. On that date a new Australian Standard for exercise cycles came into force, requiring the seat to withstand a load of 200 kg. Tests show the lower frame and seat post of this bike may bend with loads above 140 kg. Return to your nearest KMart store for a refund. If you purchased one of these bikes before June 1, you can upgrade the seat post and lower frame if you wish, at no charge. Contact your local KMart store for more information or call 1800 634 251 (Monday to Friday, 8 am to 5.30 pm).

CHOICE

The magazine of the Australian Consumers' Association
(A non-profit company limited by guarantee) ACN 000 281 925

We work on behalf of Australian consumers by producing and providing useful and accessible information, and representing and advancing their interests.
ACA is a Council Member of Consumers International
CHOICE™ is a registered trademark of the Australian Consumers' Association

Registered office: 57 Carrington Road, Marrickville NSW 2204
Telephone: (02) 558 0099 **Fax:** (02) 558 9341
Subscription enquiries: (02) 558 8088 **Consumer Information Service:** (02) 559 9855
e-mail address: ausconsumer@peg.pegasus.oz.au
World Wide Web address: http://www.sofcom.com.au/ACA/

Chief Executive Officer: Louise Sylvan **Executive Assistant:** Penny Tucker
Technical Development Manager: Norm Crothers

CHOICE
Editor: Jane Mackenzie **Deputy Editor:** Liz Munn
Journalists/Writers this issue: Dean Bell, Peter Cerexhe, Brian Champion, Jan McLean, Liz Munn, John Pospisil, Lani Zelazne

CHOICE BOOKS
Publisher: Keren Lavelle **Editor:** Tracey McTeare

CUSTOMER AND INTERACTIVE SERVICES
Manager: Chris Franks **Deputy Manager, Customer Service:** Jenni Noble
Buying: Dorothy Kneale, Jan Rigby
Consumer Information Service: Sandra Leach (Co-ordinator), Jacqueline Isles, Jane Lister, Chris Ruggles
Information Resource Centre/Administration: Katherine Alekna, Maria Athanasatos, Shirley Colless, Joanne Kladis, Yvonne Lyon, Jeanette Porter, Roslyn Sydney
Executive Assistant — Policy and Media: Robyn Miller
Information Technology: Herman Kam Wing So, Stephen Macdonald
Subscriptions: Data entry: Thelma Bracken (Co-ordinator), Jaye Graves, Fiona Pollard, Kerry Preston; Phones and correspondence: Jean Gordon, Rosemary Martin, Kathy Theochari
Customer Service Assistant: Peter Griffin

FINANCE AND PROPERTY
Manager: Alan Johnston **Accounts:** Dom Cosio, Jeanette Dwyer, Sharon Schilling

MARKETING
Manager: Janice McEwen **Marketing Assistant:** Jo-ann Poole **Designer:** Jeff Young

POLICY AND PUBLIC AFFAIRS
Manager: Mara Bün **Media Liaison Co-ordinator:** Gail Kennedy
Consuming Interest: Peter Cerexhe

PRODUCTION
Manager: Judy Gillis **Designer:** Chris Roberts **Photographer:** Rhonda Thwaite

QUALITY ASSURANCE AND CONTROL
Manager: Barbara Manchester **Quality Systems Co-ordinator:** Lisa Walton
Verification: Ron Bitmead, Pam Gardiner, Justine Geake, Francois Trahan

RESEARCH
Research Managers: Mary Harris, Alan Sharp
Consumer Research: Leanne Croker, Amy Faber, Mary Heffernan, Kate Murdoch, Christine Shaday, Joe Sydney, Livian Wong
Food, Health, Environment: Annette Coburn, Jan McLean, Sally Nathan, Helen Ross, Bernadette Walsh
Information Technology, Communications: Brad Collins, Barry Melville, John Pospisil
Money, Legal: Tom Crawley, Peter Kell **Products:** Des Shales (Associate Manager), Brian Champion, Stephen Fisher, Simon Murr, Marissa Nerwich, Raja Rajagopal, Brian de Ridder, Beverley Reichmann, Helen Rowsell

Marketing Statistics by GfK Marketing Services Pty Ltd

The Association is governed by an honorary council elected by the voting members. (For information about voting membership please contact our Information Service on (02) 559 9855.) Members of the Council give their time without reimbursement, and are not engaged as principals in industry, advertising or sales.

COUNCIL
Chair: Suzanne Russell MBA, BEd (Home Economics) **Deputy Chair:** Liza Newby LLB
Members: Allan Barton PhD; Professor George Bennett BA, PhD, ASTC; John Braithwaite; Associate Professor Simon Chapman PhD; Professor Graham de Vahl Davis AM, FTS, BE, PhD; Arthur Chesterfield-Evans MB BS; Patrick Griffin BA, LLB; Dianne Hill FCA; Ann Montague BA, MEd; Steven Pyott MSc, CTextATI, Grad Cert Ed, Adv Dip Ed; Itzhak Rez LLB, MBA; Fred Robins PhD; Liesel Scholem BA (Hons), Dip Ed, MAPsS; Graeme Wilfen BA, LLM; John T.D. Wood BArch, FRAIA.

TWELVE-MONTH INDEX

DECEMBER 1994 — NOVEMBER 1995

(T) Test
(D) Includes assessment of suitability for people with disabilities
(U) Update of previous report
*** Additions or corrections to reports, small follow-up items, or letters**

Air conditioners Nov (T)
Air pollution Jul, Oct*
Alcohol, health effects Aug
Anti-scald devices Jul (T)

Banks, savings accounts Oct
Batteries, disposal Feb
Battery recharger Jul (T)
Bread Mar (T)
Buying guide, annual Dec

Cars
- air conditioning Oct
- anti-lock braking systems Aug
- CD adaptors Mar (T)
- child restraints Apr (T), Jul*
- insurance May, Jul (U), Aug*, Nov*
- Landcruiser tyres Jan, Apr
- recalls Dec
- reliability survey Mar
- safer Mar

Caring for older people Jan, Feb*, Mar*
CD players, personal Mar (T)
Champagne and sparkling wine Dec (T)
Child car restraints Apr (T), Jul*
Chipper/shredders Jan (T)
Clothes dryers Oct (T,D)
Commonwealth Government appeals Jun
Compost bins Dec (T)
Contingency fees Jan, Mar*
Convection heaters Jun (T)
Cooktops, electric Jun (T,D)
Cooling your home Nov
Cordless drills Aug (T,D), Nov*
Credit card costs Jan

Detergents, laundry Aug (T), Nov*
Disabled,
- rights of Jun

Dishwashers Apr (T,D), Aug*
Dispute resolution Sep
Drills, cordless Aug (T,D), Nov*
Drinking water quality Sep
Drugs, cheaper prescriptions Jan, Mar

EnergyCard Jan, Mar*, Jul*

Fabrics, sunscreen Jan (T), Mar*
Fax machines Aug (T)
Film, colour print Jun (T)
Financial planners Apr, Jun*, Aug*
Food
- bread Mar (T)
- kangaroo meat Jun
- margarine and spreads, trans fat Oct (T)
- mince, 'lean' Jul (T)
- nutrient claims on labels Feb
- processed meat May
- sandwiches, pre-packaged Feb (T)
- sports drinks Mar (T)
- storage Mar
- trends Dec
- weight loss programs Nov

'Green' homes Apr
Greening your office Sep

Hair removal Sep (T)
Health services Aug
- doctors Aug
- informed consent Aug
- making a complaint Aug
- specialists Aug

Hearing damage Apr
Heaters, convection Jun (T)
High chairs Sep (T,D)
Homes, 'green' Apr
Hormone replacement therapy Nov

Index, four-year Jun
Insect repellents Jan (T), Feb(U)
Insurance, car May, Jul (U), Aug*, Nov*
Internet Jul
Investing in shares Sep
Investment advice Apr, Jun*, Aug*

Kangaroo meat Jun

Labelling, nutrient claims Feb
Laundry detergents Aug (T), Nov*
Lawnmowers, electric Nov (T)
Lead May
Locks, exterior door Dec (T)

Meat
- kangaroo Jun
- processed May

Mediation centres Sep
Mince, 'lean' Jul (T)
Modems Sep
Mortgage managers Mar
Multimedia Nov

Nutrient claims on food labels Feb

Older people, caring for Jan, Feb*, Mar*
Oldest CHOICE appliance Nov
On-line information services Sep
Overlockers May (T)

Paint, exterior May (T)
Pay TV May
Pet food Oct
Pets, rights and responsibilities Oct
Pollution, air Jul, Oct*
Portable stereos (with CD player) Jan (T)
Prescription drugs, cheaper Jan
Printers, colour inkjet Oct (T), Nov (U)
Product liability Jul

Refunds Feb
Removalists Aug
Renting vs buying a home Jul
Repellents, mosquito Jan (T), Feb (U)
Republic choices Nov

Sandwiches, pre-packaged Feb (T)
Savings accounts Oct
Shares Sep, Nov*
Ski holidays Jun
Sparkling wine and champagne Dec (T)
Sports drinks Mar (T)
St George appliances May, Sep
Stereos, portable (with CD player) Jan (T)
Strata management Dec
Sunscreen fabrics Jan (T), Mar*

Tampons/toxic shock Jun
Televisions, 51 cm Apr (T)
Timber, how to buy 'green' Feb, Jul*
Timer switches, electric Feb (T)
Trans fat, in margarine, etc. Oct (T)
Tyres, Landcruiser Jan, Apr

Vacuum cleaners, mid-priced Jul (T,D)
Video recorders Feb (T)

Water quality Sep
Weight loss programs Nov
Wood, how to buy 'green' Feb

ISSN 0009 496X Print post approved PP224733/00035
Wholly printed in Australia by Wilke Color, 37–49 Browns Road, Clayton 3168 in 1995 for the publisher, Australian Consumers' Association, 57 Carrington Road, Marrickville 2204.